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ABSTRACT

This report of remedial education at University of California--Berkeley assumes that students should be given adequate information about academic demands and their own capabilities, that they have the responsibility to prepare themselves in advance for these demands, that they should have access to academic support services on campus, and that reading and composition skills are developmental in nature, requiring academic support throughout a student's educational career. From this perspective, the present furor over students' lack of basic reading, writing, and mathematics skills is considered in the context of changing grading practices; the heterogeneity of Berkeley undergraduates; the proportion of Special Action Students--many of whom have severe academic problems; students' expectations about their college experience; and the general structure of remedial programs on University of California campuses. The advantages and limitations of several administrative alternatives are discussed. (Author/AA)

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Remedial Education at Berkeley: Why Do We Still Require It?

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Sept. 15, 1975

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Remedial Education at Berkeley: Why Do We Still Require it?

- Martha Maxwell
Student Learning Center

Abstract:

U.C. continues to require courses labeled "remedial" despite the fact that other institutions dropped such remedial courses decades ago and that research findings (including some at U.C.) indicate that the traditional remedial courses are the least effective method of solving the problems of students who are poorly prepared for college.

This report attempts to analyze the present faculty furor over student "illiteracy in reading, writing and mathematics" and students' increasing demand for and use of academic support services within the context of current academic practices and facts, specifically:

1. Grading: Students are receiving higher grades than ever before ("B" is now average grade for Freshmen). The numbers of students placed on L&S probation are declining.
2. The heterogeneity of Berkeley undergraduates on traditional measures of scholastic aptitude is increasing. (Berkeley is still attracting as high a percentage of students scoring above 600 on the SAT-V as it did in 1960; however, the average SAT scores have dropped.)
3. 4% of the new admittees are Special Action Students and many have severe academic problems.
4. Student views that faculty are failing to provide them with the educational experiences they expect and need.

5. The structure of remedial instruction on this and other U.C. campuses and the increasing enrollments in remedial mathematics and composition courses.

Several administrative alternatives are described along with the advantages and disadvantages of each:

1. A separate holding college or department.
2. A required pre-college summer "Bridge" program.
3. Administrative reorganization techniques including positions and functions of Dean of Freshman Studies or Dean of Lower Division Courses.

The basic premises of the report are that students should be viewed as adults, given adequate information about the academic demands and expectations of faculty and their own capabilities; that they have the responsibility of preparing themselves in advance for these demands through various options including community college courses and when enrolled on campus, they should have access to academic support services on a voluntary basis; and that reading and composition skills are developmental in nature so that students need faculty and academic support service throughout their educational careers from freshman through graduate school.

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Remedial Education at Berkeley: Why Do We Still Require It?

Preface

The question of the reasons for the preservation of Remedial Education at Berkeley must be considered within the context of the educational and affirmative action goals of the institution, the diverse characteristics, changing needs and goals of the students, and the characteristics, teaching strategies and expectations of the faculty. Other essential considerations include registration and admissions policies and procedures, and the available academic support services including skills and tutoring assistance, counseling, advisement, and other student services. Budgetary constraints and the shrinking pool of traditionally qualified high school graduates are realities which affect both present and future programs plans.

That Berkeley offers any courses labeled "remedial" is an anathema and an embarassment to faculty, administrators and students alike. Yet despite its academic prestige, Berkeley has always admitted a wide diversity of undergraduate students and Subject A (the remedial writing course) has been in the catalogue since 1898.

Although the fact that 50% of the Berkeley freshmen were enrolled in remedial English last year made national headlines, statistics show only very small percentage increases over those held for Subject A in the 1950's.*

Most universities dropped remedial English courses in the 1950's. Not only has Berkeley preserved Subject A, but this year the cut-off score for Subject A has been raised so that undoubtedly more students will be held for the requirement.

The Muscatine Report** of 1966 failed to mention "remedial" courses. Evidently, they were not considered a problem in that era. Why then the present furor? Although there are some indications that college students across the country are doing less well on tests of verbal ability, Berkeley still attracts as great a proportion of high ability students as it did in 1960. However, it is simultaneously admitting larger numbers of underprepared students. The Special Admits, especially the EOP students, although they have been at UCB since 1968, seem suddenly to have attracted the attention of the faculty. Perhaps the Vietnam War and students protests in the late 60's and 70's consumed the energy and attention of the faculty so that they have only recently rediscovered the students as problems.

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* Turner - Martin Report on Subject A. 1972

** Education at Berkeley - The Muscatine Report, Report of the Select Committee on Education, U.C. Press, Berkeley and L.A.. 1968

In this paper, I will describe briefly the history of college remedial reading and writing courses at Berkeley and other institutions, the present views and actions proposed by faculty and students. Also some current facts including the increasing diversity of students, the steady rise in grades and the declining numbers of students placed on probation are presented and discussed. In contrast, how students see faculty as failing to provide them with the education they want is also described.

A number possible administrative models and strategies are presented and a series questions are raised.

II. Brief History of College Remedial Reading

In 1938, Harvard, concerned with the reading disabilities of a few of its students, established an experimental Remedial Reading Course. Each fall, freshmen were tested and those who scored lowest were informed of their plight and allowed to volunteer for the course. 30-35 students regularly signed up for the 20-session class. In 1946, the Bureau of Student Counsel took over the program and when they administered a standardized reading test to the remedial class, they found that every student scored higher than 85% of the college freshmen in the country. They then revised the program, dropped the term "Remedial" from the course, renamed it "The Reading Course" and 800 students signed up (including two law professors.)*

In order to handle the multitudes of Harvard students who wanted to improve their reading, Perry devised a new kind of reading test to screen those students who might be most likely to benefit from the course; specifically those who "if they can be persuaded of their right to think, even though reading, . . . can develop a broader and more flexible attack on the different forms of study and put their skills to work on long assignments." The test consisted of 30 pages of detailed material -- a chapter from a history book entitled "The Development of the English State, 1066-1272." They were instructed to see what they could get from the chapter in 22 minutes of study. When tested on multiple choice questions, they were able to answer "every sensible question we could ask concerning the details." However, when asked to write a short statement on what the chapter was all about, only 1% of the 1500 students tested could do this, even though there was an excellent summary paragraph marked "Recapitulation" at the end of the chapter. Virtually all of the freshman class read with an "obedient purposelessness" that would be most counter-productive to course reading. Then Perry devised another test to screen the group further and limit the number of students admitted to the course. This consisted of a history exam question with two answers provided. Purportedly written by two students. One answer was "a chronological reiteration of the chapter by a student with an extraordinary memory for dates and kings and no concern for the question or any other intellectual interest" (an answer that might be given a C- for effort.) The other answer was shorter with no dates in it, and addressed stringently to the issues posed by the question. (Probably worth an A- or B+) Students were asked to judge which answer was better. One third of the class picked the C- answer and these were the students permitted to enroll in the Reading Course.

Following Harvard's example, most colleges and universities offered Developmental Reading Courses, laboratories or programs to their students. Currently, many of these programs are being subsumed under the title of Learning Centers.

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*Perry, William G., "Students' Use and Misuse of Reading Skills: A Report to a Faculty", Harvard University, 1958.

Berkeley began its first Reading and Study Skills Service in 1968, when Mrs. Barbara Kirk, Director of the Counseling Center brought Ms. Martha Maxwell from the University of Maryland. Prior to 1968, Berkeley students who wanted reading and study skills services took Mrs. Doris Gilbert's courses in University Extension. The Counseling Center's Reading and Study Skills Service was open to all students without fee and both undergraduates and graduate students used its programs. In 1973, as a result of Vice Chancellor Smith's reorganization of student services, the Student Learning Center was founded bymerging the Reading and Study Skills Service staff with the staff from the former EOP Tutorial Program. The Student Learning Center presently offers a diverse array of group and individual programs for students who seek to improve their reading, writing, and study skills in science, mathematics, foreign languages and other subjects.

History of Remedial Writing

Freshman English began at Harvard in 1874 because the faculty was dissatisfied with the writing skills of upperclassmen and sought to remedy the deficiencies they felt were lacking in high school college preparatory courses. The original purpose behind the almost universal institutionalization of Freshman English in colleges across the country was to "make up" for what students "failed to learn" in high school. In essence, Freshman English is and always has been a "remedial course".

Berkeley's Subject A course goes back to 1898 when the University first required high schools to certificate each applicant's proficiency in Subject A (Oral and Written Expression) and students who were not certificated were required to take a remedial non-credit composition course. Although, there were many disputes over the course* a fee has been charged for students taking it since 1922 and it is an accepted Berkeley tradition, known to generations of Berkeley students as "bonehead English".

Berkeley faculty have never been and probably never will be satisfied with student writing. The same proportion of students were held for Subject A in 1950 as in 1974. Why then is there the present furor over students' writing and reading skills? A national educational crisis has been fomented with many of the same overtones as the furor over mathematics and science which immediately followed Russia's launching the first Sputnik. It is almost as if whenever there is a quiet period without the distractions of war or social protests, the nation's attention is refocused on the educational inadequacies of the young.

With the exception of English, Literature and Rhetoric professors with whom I have talked, there seems to be a common assumption by many faculty - that is, that "good writing" can be taught in a course or two "by somebody else, not me".

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* Nationally the assault against Freshman English began in 1911, continued in 1928, 29, 31, 34, 37, 39, 50, and the battle is still being fought.

Professor Josephine Miles expresses an iconoclastic but realistic position when she states,

> We know that good writing, like good thinking, cannot be taught "once and for all". It's not a simple skill like swimming; indeed, even a swimmer can be coached to get better and better. Thinking is one of our most complex abilities, and writing is evidence of it. So students need help with writing at many stages, from third grade to eighth, to tenth to high school, to college and beyond, and from subject to subject. Whenever a new stage of thought and a new subject-matter comes along, the accumulated abilities of the student need conscious and thoroughgoing adapting to the new material and maturity. Therefore, the concept of 'remedial' work is misdirected; the teacher who sends a student back to brush up technical details is trivializing his own serious job of helping the young writer adapt his present active skill and latent knowledge to important new demands.*

In addition to the complexity of the thinking-writing process and the developmental nature of writing (i.e., undergraduates are rarely capable of writing a paper publishable in a professional journal and should not be expected to), there are other factors that make writing difficult for students. First, students are rarely able to assess the quality of their own writing; they are not taught to do so, and often are unsure of the criteria by which their writing will be evaluated. (In some cases, writing problems do not show up until the student begins his dissertation. As a science major, for example, he has never been called upon to perform dissertation-type writing before.) Second, good writing requires practice and without practice few students can perfect their writing. Third, writing has its emotional as well as cognitive component. Writing is personal and if a student has been criticized and given poor grades for spelling and grammatical errors, he may concentrate on correct grammatical expression to the exclusion of ideas, or be terrified of the expected criticism and block. Many professional writers suffer "writer's block", and some have interesting ways of dealing with it.**

I often suspect that professors who are most critical of students' writing must have repressed their own writing problems and struggles. There are very few people who can write fluently and well under time pressures and deadlines. For most of us it is an agonizing and time-consuming task that requires many revisions. Yet we expect students to blast out several high quality papers in a Quarter.

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* Miles, Josephine, "What We Already Know About Composition and What We Need to Know." (excerpt from College Composition and Communication Conference.) Note: Although Prof. Miles' point is well taken, large classes and other priorities on their time limit even the most highly motivated professor from direct, individual work with students. Thus there is increased need for services like the those of the Student Learning Center to provide individual help to students.

** Edwards, Owen, "Writers' Block: Why Words Fail Them", New York Magazine, April 16, 1972.

How do they do it? Some hire the same secretaries who type and edit professors' papers during the day and "moonlight" by typing and editing students papers at night. Some hire "ghost writers", illegal but still available, at a price.* Others have their spouses or friends edit and help them. Those who do it alone, like some of my graduate students, turn in first drafts and suffer from the competition.

Does Subject A help? Students resent being forced to take the course, being charged for it, and many do not see it as helping them improve their writing for advanced courses. Professors, on the other hand, see Subject A as the preserver of literacy and intellectual written discourse on campus, and expect students to emerge from it with impeccable grammar and the ability to organize and express complex ideas on paper forever more - a difficult set of objectives for a 10-week course to attempt to meet. (See Appendix B for more information on Subject A.)

Other four-year institutions dropped the term "remedial writing" in the 1950's. U.C. still clings to the remedial tradition for the average student, one of the last hold-outs in the country. Note: In community colleges the situation is different as most accept providing basic literacy skills to non-traditional students and ex-high school drop-outs as their responsibility. In local community colleges (e.g., Santa Rosa, Laney, and San Francisco City Colleges) "remedial reading courses" are popular and often have waiting lists. Courses labeled "Phonics" fill readily whereas courses which offer transfer credit called "Critical Reading" often do not fill.

There is a vast difference between a school like Bronx Community College which draws its students from the bottom 50% of local high school graduates and U.C. Berkeley whose students come from the upper 12 1/2% of state high school graduates in terms of academic goals. Yet both institutions require that 50% of their freshmen take "remedial writing."

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* Steve Hart reported that there were some 70 Berkeley "ghost writers" in 1971, who, for a price, will research and write almost any assignment -- from a term paper to a dissertation. Since literature M.A.'s and Ph.D.'s are regularly augmenting the pool of unemployed, there may be even more today. (Hart, Steve, "Ghost Writers Make a Living Doing Papers", Daily Californian, October 7, 1971.)

High School Factors

There are many indicators that nationally students' pre-college preparation is changing (i.e., significantly lower SAT scores, declining reading achievement scores (particularly at the junior and senior high school level), poorer writing skills, etc.) High school grades are inflated so that entrance criteria based on H.S. GPA's may be obsolete and need to be re-evaluated.

The situation can only worsen as school budgets are cut, class sizes increased and teachers have less time to devote to the development of individual students' skills. For example, few high school English teachers have the training and expertise to help students in remedial reading and writing. At a recent meeting of the Northern California Teachers of English, the group of 250 was asked "How many of you have had training in teaching composition?" Less than 10% of the group responded affirmatively. (Note: The best attended program at that meeting was "Mime in the English Classroom.") However, the group endorsed 1976 as "The Year of Composition."

Although it is beyond the University's power to change the downward trend of the "3 R's" in public education, some attempts are being made. The summer program directed by James Gray is coordinated with and includes instructors from the Subject A Department, has been held for the past two summers and is an attempt to improve the teaching of high school English in the Bay Area. About 30 high school English teachers attend this summer program. This, although a small program, merits consideration as a model and should be expanded.

III Overview of Berkeley's Remedial Courses and Academic Support Services

Undergraduate Level

1. Academic Courses:

   Undergraduate remedial education at Berkeley is defined as the following courses: Subject A*, Math P, Math 6 A & B, and English as a Second Language. (The latter department offers 6 courses in English Composition and Conversation.) All of these courses give partial academic credit, but only Subject A requires that students pay a $45 fee.** (For a more complete description of each course and a comparison of offerings on other campuses, see Appendix B.)

2. Academic Support Services: (non-credit)

   The Student Learning Center, funded by registration fees, offers a variety of non-credit mini-courses in basic concepts and skills, self-help programs, computer-assisted instruction, and individual tutoring. (Skills and course tutoring are offered in reading, vocabulary, writing, speech, mathematics, statistics, foreign languages, pre-chemistry, chemistry, physics and biology. EOP students, athletes and students in academic difficulty are given priority for the Center's services. Student use of the Center has doubled this year when over 4,000 students enrolled voluntarily in its various programs.

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* Asian Studies 6 A offers 5 units; charges no fee and is an alternative for students held for Subject A.

** There are no academic courses offered for review of high school chemistry and physics. However, the Student Learning Center offers pre-chem. and Prof. Reif's Physics 6 A (a self-paced program) requires that students pass a mathematics test or take a self-paced math. review.

A few academic departments provide limited tutoring help to minority students (e.g. Engineering had two tutors last year and Chicano Studies had a peer-tutoring program) L & S last fall instituted a program where Special Admit students were permitted to carry a reduced course load.

Student groups including the Honor Societies, Black Students for Economic Development, and La Raza Engineers Association offer free tutoring to other students and there are also some privately funded programs such as the current Undergraduate Engineering Program for Disadvantaged Venezuelan Students.

Graduate Level

The Graduate Minority Science Program is the major campus program at the graduate level that provides remedial services and offers academic support services including tutoring to minority graduate students in sciences. The groups not included are white women entering non-traditional graduate programs (e.g. Engineering & Physical Sciences) and graduate minority students in non-science programs.

The Student Learning Center provides limited service to graduate students in writing, reading, study skills, German and statistics. Also the SLC has programs to help students prepare for GRE and professional school admissions tests.

Faculty from several of the UCB professional schools (Education, Health Sciences, Optometry, Law School, Public Health and the UCSF School of Nursing) have requested that the SLC provide help in writing and study skills for their

IV Faculty and Administrators Recognize the Need for Remedial Instruction

Evidence that the administration recognizes the problem is the fact that the Chancellor proposed a Summer Threshold Program last year which would require all students needing remedial courses to attend a special summer session, with an anticipated enrollment of 2000 students. Also, L&S offered a "reduced course-load" option for Special Admit students in the fall of 1974.

Faculty have expressed their concern about the unacceptable level of student writing at Berkeley for at least 77 years.* Last Year, Professor Georg Isaak of UCD, Chairman of the State-wide Subject A Committee, citing a number of surveys on different campuses including Berkeley, concluded that the problem is "not marginal but widespread."

The All-University Faculty Conference on "The Entering Undergraduate Student: Changes and Educational Implications", held in Davis in March 1975, recommended that a state-wide task force on remedial education be established. Such a task force was formed and is currently chaired by Professor W.C. Harsh of U.C. Davis.

The attitudes of some of the more vocal faculty toward remedial measures is both punitive and emotional. Implementation of some of their proposals would do little to solve the problem but greatly increase the stress on the average undergraduate. For example, the recent recommendation made by the

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* According to the Turner-Martin Report on Subject A (1972), faculty committees have been regularly studying, writing reports and making recommendations since 1905 when high school certificates attesting to the student's proficiency in Subject A were no longer accepted by the University and all applicants were required to take a test administered by the University Subject A Committee.

All-University Faculty Conference that all U.C. sophomores be required to pass a test to demonstrate their skills in reading and writing before they could enroll in junior courses would be 1) impractical; 2) exorbitantly expensive and difficult to implement; 3) absolve faculty of their responsibilities in setting standards, teaching and evaluating students' writing and enable them to continue to give high grades while complaining about student writing (See Section on Increase in Grades and Appendix A); 4) Might this not penalize the majority of students by increasing the stress and exacerbating their test anxiety? and 5) Would this effectively eliminate the few illiterate students it is designed to stop -- i.e., if students have managed to survive at Berkeley through the sophomore year with grossly deficient reading and writing skills, they are highly skilled at evading requirements including a "required test."? The project would be impractical since developing criteria that professors from art, history, engineering, chemistry, literature, forestry, etc. could agree upon as evidence of satisfactory writing at the college sophomore level would be a futile, though interesting interdisciplinary exercise. Even if this were accomplished, the test would have to be an essay exam;* expensive to administer, score, norm and implement.**

Other faculty are deeply concerned about the problem but are unsure of how it can best be solved.

(It is interesting that despite faculty concern, less than 10% of the students of the students who seek writing assistance at the Student Learning Center are referred by faculty or TA's.)

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* The correlation between ability to answer multiple-choice questions on tests of effectiveness of expression or grammar although reasonably high is not high enough to detect those students who are unable to write a satisfactory term paper. Most Berkeley students perform well on objective exams with the exception of minority students for whom the correlation between test scores and grades is low.

** Note: U.C. Davis' L&S College required students to take a 1 1/2 hour English Reading and Composition test prior to graduating. In May 1974 the Academic Senate modified the requirement so that students now have the option of taking the test or taking any two English Courses. (Source: Isaak, W. Georg, Survey of Compositional Instruction in the Department of English, U.C. Davis. (1974?)

V Students Want to Improve Their Skills

Victims of the "curricular chaos" of the 60's, many Berkeley students recognize that college requires more than the effortless escalator trip that frequently typifies today's secondary school programs, are very aware of their deficiencies, and want help. Others are well prepared and intellectually capable students who are nonetheless anxious, afraid of failure or feel intimidated by the University's academic image -- and seek SLC and Counseling Center services.

Evidence:

1. Results of the ACE Questionnaire Administered to H.S. Students Entering Berkeley in the Fall of 1974 Showed That:

[N = 1873]

50% stated they will need help in Writing Skills
41% " " " " " " Math Skills
32% " " " " " " Reading Skills
37% " " " " " " Study Efficiency

(Data source: SARO)

College Board staff recently reported at a meeting that the entering class of 1975 showed a 50% increase in their responses to these questions.

2. Heavy Student Demand for Student Learning Center Services

Over 4000 Berkeley students participated in the Student Learning Center's various programs during the academic year 1974-5. A survey of a random sample of Center users indicated that 76% of the students wanted more appointments than they got!

Over half of the EOP students registered on campus this year used the Student Learning Center's services. 753 different EOP students made 1105 requests for skills and tutoring service and received 7128 individual appointment hours.

VI Some Facts about Current Student Characteristics And Their Academic Achievement

1. 70% of Freshmen will be held for the Subject A Diagnostic Test this Fall.

Under the new regulations requiring that Freshmen with CEEB English scores lower than 600 take the Subject A Diagnostic Test, 70% of the new Freshmen will be held for the Subject A Diagnostic Test (based on the 1974 Freshmen CEEB scores).

Although of the 563 Berkeley students tested by the Subject A staff this spring, 38% passed,* subsequent testings have shown that only 10-15% of the students are now passing the Exam (about the same percent as under the old 550 cutoff score).** Therefore, there will probably be more students taking Subject A this fall.***

2. Increasing Diversity of Berkeley Students -- Higher Percentages of Freshmen are Making Lower Scores on the SAT-Verbal Test.

In addition to the increasing diversity of their social, economic, cultural and ethnic backgrounds, entering Freshmen show more heterogeneity on the

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*Brooks, Phyllis, Subject A Report 1974-5, Appendix 2, UC Berkeley

**Davis, Kim, Subject A Department - Personal communication

***The Subject A Department can control to a significant degree, the numbers of students held for Subject A by varying the criteria and cut-off scores used in grading the Subject A Diagnostic Test.

traditional measure of scholastic aptitude (SAT-V). Although the SAT-V scores represent only one factor in predicting college success, the results show that increasing numbers of low-scoring students are being admitted.

SAT Verbal Scores of Entering Berkeley Freshmen*

Year	Total # of Freshmen	% of students scoring above 600	% of students scoring below 500
1968	2047	40%	21%
1973	2883	28%	27%**
1974	2556	30%	34%

(Data source: SARO)

Note: There has been a nationwide downward shift in SAT-V scores between 1967 and 1974 with the most dramatic change showing in the proportion of students at the upper level (i.e., the percent of students scoring above 600 fell by one-third.)*** Average Freshman scores for Fall 1975 indicate SAT scores are still sliding (Nationwide SAT-Verbal score averages dropped 10 points this fall over

*These figures under-represent the actual number of students with low potential since 20-30% of Special Admit students do not take the College Board Exams. (E.g. of those admitted for 1975, 31 Special Admit EOP students did not take the test. Data from ORS.)

**68% of the EOP Freshmen admitted in 1973 scored below 500, however, the Fall GPA for EOP Freshmen was 2.83, virtually the same as for the total Freshman class. (Data from OAR EOP Annual Report, Academic Year 1973-4, UC Berkeley, April 1974.)

***Scully, Malcolm G., "Fewer Score High on the College Board", Chronicle of High Education, Vol. X, March 3, 1975.

1974 and (average) mathematical scores dropped 8 points.*

3. Freshmen Grade-Point-Averages are Steadily Increasing

"B" has replaced "C" as the average grade at Berkeley. Over the past decade, the percent of freshmen with overall GPA's of B or higher in the spring quarter increased from19.3% in 1964 to 52% in 1974; while the percent of freshmen earning GPA's below C has decreased from 23.7% to 5%. (For figures, see Appendix A.)**

Although the numbers of Berkeley freshmen students with low SAT scores has increased steadily in recent years, the average Fall freshman GPA has steadily increased:

Fall Freshman GPA	
1964	2.4
1968	2.66
1973	2.84
1974	2.95

(Data source: UCB Office of Institutional Research)

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* El Cerrito Times, Sept. 10, 1975 and San Francisco Chronicle, Sept. 14, 1975.

** The escalation of college grades reflects a national trend and is not limited to the Berkeley Campus. Stanford announced recently that it is "reinstituting" the "D" grade in an attempt to reverse the trend.

One factor that has not been mentioned as a possible cause of the declining SAT scores is the present economic recession which has affected the middle class family perhaps more than other groups. In past depressions and economic recessions the academic qualifications of entering college students tended to decline since the brighter high school graduates were more likely to find employment than their lower achieving peers. It may be that today more middle class students are chosing to work and/or attend junior college or night school while living at home rather than to enter the University as freshmen as educational costs rise and inflation takes its toll on family income. Since scholarships and grants are awarded to low income students and there are fewer awards currently being given on the basis of academic merit alone, then perhaps colleges are attracting the rich and the poor (especially minority students) and fewer students from middle income families.

The total number of students taking the College Boards in the nation has declined over the past decade and junior colleges typically do not require SAT or CEEB's. Also, the fact that college graduates are having a more difficult time finding jobs after graduation may also be a factor affecting the decisions of academically capable middle-class students.

This is a topic that merits further study.

4. The Numbers of Students Placed on Academic Probation in L & S Have Declined Over the Past Four Years

L & S Probation Figures

	# Students on probation at start of Fall	Dismissed at the end of Fall quarter		Cleared of probation		Continued on probation		Withdrew
		N	%	N	%	N	%	N
Fall 1971	444	112	25.5	180	41.5	132	29.7	20
Fall 1972	401	77	19.2	180	44.8	126	31.2	18
Fall 1973	419	94	22.4	212	50.6	103	24.6	10
Fall 1974	349	90	25.8	148	42.4	89	25.5	22

(Data source: R. Kihara, Head L & S Lower Division Advisors)

Academic Probation

Based on SAT scores and the number of students needing intensive help in writing in Subject A and coming to the SLC, there is evidence that the University is admitting larger numbers of poorly qualified students and one would expect that probation figures in L & S would reflect these changes (especially since 80% of the Special Admit Students enroll in L & S).*

These data on L & S probation reflect no clear trends over the past four years although there was a drop in the number of students on probation at the start of Fall Quarter 1974 compared with previous years. The percentages dismissed, cleared or continued appear to fluctuate over the four year period.

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* Data source: 1975 OAR Report

Discussion

The facts cited above raise some interesting questions —

How can we reconcile the fact that the verbal ability of entering Freshmen appears to be steadily declining with the facts that the grades of those same Freshmen rise steadily and the numbers of students on probation and dismissal have shown little change?

Are professors becoming more lenient in their grading, relaxing standards, displaying the so-called "Inflation of Grades Syndrome" (Often attributed to the fear that negative student evaluations will have negative effects on their tenure and promotion aspirations), or being more permissive?

Are the faculty becoming more responsive to diverse student needs and goals?

Or are professors indeed using a dual grading system, with one set of expectations and criteria for the well-prepared, intellectually sophisticated student and another for the poorly prepared student who lacks the skills and background for "traditional college work"?

Or does the SAT measure factors which are no longer as crucial to success in the college curricula as they once were? Or does it reflect out-dated values and skills?

Or have the students themselves mastered learning or coping strategies which are not measured by the test but have earned them success in high school and are equally effective in college?

Or are faculty grading practices affected by the current zeitgeist and relatively independent of student scholastic aptitude as Appendix A-2 suggests --i.e., during the period 1948-60, student SAT scores increased 50-100 points,

yet average freshmen GPA's remained the same.

Or a r e college professors de-emphasizing reading and writing assignments in response to the new generation's affinity for television and audio-visual media rather than traditional reading and writing skills?

Indeed, these data do pose a dilemma.

Discussion

How much have students changed? Martin Trow* described the size and heterogeneity of the 1960 Berkeley freshman class as containing the equivalent of one MIT freshman class, one Amherst class and three classes from Kutztown State College in Pennsylvania with the freshman classes of a number of other institutions in between. He reported that 30% of the Berkeley L & S freshmen in 1960 scored over 600 on the SAT-V and 29% below 500.

In 1974, 30% of the Berkeley freshmen scored above 600 on the SAT-V so we are still maintaining the same proportion of verbally proficient students, though we are also admitting more with lower scores (34% in 1974). What has changed most dramatically is the number of students with very low scores. In 1974 Berkeley admitted 58 students with scores below 300;** in 1960 there were none. (Note: ETS Berkeley Office reports that only 8% of the college students in the nation score below 300 on the SAT-Verbal.) Further, an additional 20-30% of the Special Admit freshmen were admitted to Berkeley without having taken the College Board Exams.

To update Trow's analogy, we now not only have our MIT and Amherst freshman classes but also the equivalent of one Nairobi College class and many

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*Trow, Martin, "The Undergraduate Dilemma in Large State Universities", University Quarterly, 1966. pp. 17-43

**Maxwell, Martha, "Barriers to the Persistence of Minority/EOP Students at UCB", 1975.

in between. (Nairobi College in East Palo Alto is an alternative community college whose students do not take College Boards, whose courses are not accepted as transfer credits at UC, yet whose freshmen--in the past (circa 1972)--were required to take a full-time one year reading and writing course prior to enrolling in regular courses.) Thus, at Berkeley, we enroll some barely literate students yet expect them to catch up with their well-prepared peers in one quarter of Subject A. Obviously, they cannot.

VII The Special Problems of the Four Per-Cent (Special Admits - Special Action)

Prior to 1968, 2% of the annual admissions slots were allocated to students who did not meet the University's minimum entrance requirements. Those students were quite varied, i.e., students with special talents such as athletes, musicians, etc. Others were admitted who lacked a unit or two of high school credit.

In 1966 when the EOP program began, a small number of educationally disadvantaged minority students were admitted under the 2% rule. A follow-up study of the 1966 Special Action Admissions freshmen by Austin Frank of the Student Affairs Research Office showed the following:

Of the 25 S.A. Athletes, 64% completed degrees in 5 years.

Of the 23 S.A. EOP Women, 35% completed degrees in 5 years compared with 58% of all L&S women students admitted that year.

Of the 17 S.A. EOP Males, 42% completed degrees in 5 years compared with 57% of all L&S males.

Of the 73 S.A. Others, 42% received degrees in 5 years.

Subsequent studies on EOP Special Admits (e.g., OIR and State-wide EOP reports) show that 20% to 25% of the EOP students graduate, however, it is not clear whether these are figures for 4 or 5 years after entrance.

NOTE: Typically, in programs involving high risk admittees, those who enter in the early years of a program tend to persist in college longer; fewer of those who enter in later years, when the program has become institutionalized and larger numbers of students are enrolled persist to graduation, e.g., in a special probationary program for low achieving high school students at the University of Maryland the percentage graduating in 5 years dropped from 35% in 1947 when 50 students were admitted to around 20% in 1957 when there were approximately 1000 students admitted to the program.

In 1968, the special admission quota was increased to 4% to provide

access to the University for more educationally disadvantaged minority students. In Fall 1974, the quotas changed to reduce the number of athletes admitted under this regulation and increase the number of EOP students and others, however, the total remained at 4% of new admittees.

Per-cent of Special Admit Openings Allocated to Different Groups

	Fall 1968	Fall 1974
EOP Students	62%	65%
Athletes	25%	20%
Others	13%	15%

(Data source: OAR)

Although small in numbers (319 were admitted in Fall 1974), the Special Admit Group causes more concern and consternation among faculty and administrators than the general undergraduate population.

Some Facts about Special Admits:

About half of the special admit students are admitted as freshmen and half with advanced standing. 80% of the special admit students are enrolled in L&S.

They make significantly lower grades than other students. An OAR follow-up showed that 28% of the freshmen and 38% of the advanced standing special admits in 1972 had GPA's lower than 2.0 at the end of their first year. Of the 1973 group, 27% of the freshmen and 27% of the advanced standing students averaged below 2.0 in their first year.

In 1973, 39% of the S.A. EOP freshmen and 46% of the EOP special action students admitted with advanced standing had GPA's under 2.0 at the end of their first year.

In 1974, 46% of the athletes admitted with advanced standing had less than 2.0 GPA's in their first year compared with 27% of EOP advanced standing students. The groups do appear to fluctuate in grades and persistence from year to year. (For OAR figures, see Appendix G 1&2.)

More data are available on the EOP special action students than on the other special action groups,* but the figures tend to be discouraging.

Grade-Point-Averages of U.C. Berkeley Special Admit EOP Students are lower than EOP Special Admits at any of the other U.C. campuses.

The Percentage of EOP Special Admits who Earned GPA's Below 2.0 in 1973-4

Campus	% Below 2.0
Berkeley	40.5%
Davis	20.8%
Irvine	18.1%
Los Angeles	17.5%
Riverside	22.3%
San Diego	20.1%
Santa Barbara	25.0%

NOTE: The percentage of regularly admitted EOP students with GPA's lower than 'C' at Berkeley (11.1%) is comparable to other campus (range from 8.6% to 13%).

Data Source: "The Report on the University of California Educational Opportunity Program" - Office of the President, March 5, 1975.

* OAR has kept records of Special Action students since Fall 1973 and Austin Frank of SARO is beginning a follow-up study on Special Action Students.

Many drop-out after their first year

- In a study of the 92 EOP Special Admit Freshmen for Fall 1973, 51 students or 88% remained at the University for three quarters; however, only 55% were enrolled for a fifth quarter.*
  90% of them were held for Subject A.
  Most have very low scores on traditional Scholastic Aptitude Measures although these scores do not appear to relate to their academic persistence.

- The mean SAT scores of Special Admit EOP students remaining at the University for different amounts of time showed no consistent trends, except students who dropped out after their first quarter had higher average scores.

Mean SAT Scores for Freshmen EOP Special Admits

	Verbal	Mathematics	Number **
Remaining only 1 Qtr.	414	470	10
2 Qtrs.	358	392	6
3 Qtrs.	339	399	21
5 Qtrs.	349	428	33

* Marwell, Martha and Ellen Chase - "Profile of the Successful EOP Special Admit Students" (study in progress)

** Not all students took the SAT.

How do the Special Admit EOP students who survive cope with Berkeley's academic demands?

- Of the EOP Special Admits who persisted for 5 quarters, 79% took one or more ethnic studies courses during their first year; 60% took 2 or more and 44% carried 3 ethnic studies courses.*

  Of the courses they completed, they most frequently made A's or B's in the ethnic studies courses, incompletes in Math., D's in social sciences, science and math and F's in sciences and math. However, 45% of the "successful" EOP Special Admits had not satisfied the reading and composition requirement by the end of their fifth quarter.

- It is difficult to generalize about EOP Special Admit students since the different ethnic groups select quite different majors and their GPA's are different. Asian-American EOP students tend to major in science and make higher grades than other ethnic minorities and their GPA's are usually equivalent to the typical Berkeley student. Black students tend to major in social sciences or business and make lower averages than other groups. Chicanos, Mexican-American, white & "other" EOP students tend to earn GPA's lower than Asian-American and higher than Black EOP students. (Data source: Quarterly EOP computer printouts from OAR.)

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* This is not meant to imply that Ethnic Studies courses are necessarily easier than other courses. It may be that the minority EOP students find them intrinsically more interesting than traditional social science breadth courses and feel greater identification with the concepts and instructors and more highly motivated toward the work required. It has been my observation that some Ethnic Studies courses are academically rigorous and some are not, but the fact remains that EOP students make higher grades in Ethnic Studies courses than in other social science courses.

- Black EOP students whether Special Admits or Regular Admitted EOP students have great difficulty with reading and composition courses:

Evidence:

1. High School studies show that the upper quartile of Black students average more than 6 grades lower in reading and language skills than white students* (See Appendix H).
2. Although more Asian than Black students take Subject A (16% vs. 12%), 87% of the Asian students passed, while only 59% of the Black students passed Subject A in 1974-5.**
3. Since more of the Black students aspire to majors in the social sciences, their reading and writing deficiencies probably handicap them more than they would students in the sciences or other majors. Evidence: A higher proportion of junior EOP students come in for reading and writing help at the SLC than do freshmen (and this has been typical since the Reading and Study Skills Service began in 1968).

Junior courses in social sciences typically demand heavy reading assignments and written term papers. Perhaps this is one of the reasons for the drop in grade-point-averages shown by regularly admitted EOP students from their freshman to senior years. Special Admit EOP students do demonstrate a small, but steady increase in GPA.

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* Jenkins, Harriett G., Asst. Superintendent of Berkeley Unified School District, "Black Parents' Concerns", April 17, 1973. (See Appendices B, C)

** Brooks, Phyllis, Subject A Report 1974-5, U.C. Berkeley

Mean GPA by Class (Fall 1973)

	Total Undergraduates (N=19,729)	Reg. Admit EOP Students (N=783)	Special Admit EOP Students (N=685)
Freshmen	2.83	2.85	2.31
Sophomores	2.94	2.76	2.35
Juniors	2.92	2.62	2.49
Seniors	2.99	2.62	2.52

(Data source: EOP Annual Report 1973-4, OAR, Sept. 1974)

Regular admit EOP students achieve GPA's as freshmen as regular undergraduate freshmen, however their GPA's tend to regress from Freshman through Senior year in contrast to typical undergraduates.

The above figures could also be interpreted to indicate that junior transfer students were having more difficulty in meeting U.C. academic standards than they had in community college.

Other evidence that this phenomenon occurs at Berkeley includes the fact that EOP Bridge freshmen students earn fewer B's in basic social science courses (not including ethnic studies) than they do in writing, mathematics or science.*

The evidence strongly suggests that Special Admit and EOP Black students have a difficult time adjusting to the rigorous reading and writing requirements of the L&S social science departments they chose to enter. Many are ill-prepared in basic reading and writing skills and the products of academically weak high schools and/or community colleges. Since social sciences are the most popular undergraduate majors, they face the competition of some of the best prepared and intellectually sophisticated Berkeley undergraduates.

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* Maxwell, Martha (op. cit.)

DISCUSSION:

The Special Admit Program has enabled educationally disadvantaged and low-income minority students to receive a University education. That a significant number have completed degrees is a tribute to their intense motivation and resourcefulness and the help of dedicated faculty and support services. At present, about half of the EOP Special Admit students are completing at least two years of college. On the other hand, the fact that 30-35% of the EOP special admits remain for three quarters before being academically dismissed or withdrawing is a function of our archaic probationary and dismissal regulations which are based on the assumption that "C" is the average grade. These students, although small in actual numbers are those who are least prepared for college work, i.e., 6-8 or more years behind in academic skills including reading and writing and succeed only in traumatizing and being traumatized by professors and the academic system. There is no remedial program in the world that can insure that a group of students who are six years behind will be able to catch up with their peers in one year, much less in one quarter. They demand and need intensive tutoring help, skills work and counseling and the cost is high and the pay-off is minimal. For example, one student spent over 150 hours in one quarter being tutored in writing in the SLC, and although he improved from a second or third grade level to a fifth grade writing level, he still was far below the minimal level required to pass Subject A (which he had failed for three consecutive quarters.*)

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*Although this seems an extreme example, the Subject A Department's recent exhibit of problem student themes and the number of very low students who seek help from the SLC supports that fact that such cases are not rare and are increasing. Certainly the University could screen out students whose reading and writing skills are below the 8th grade level and refuse them admission until they improved their skills.

The answer lies partly in more careful screening and selection of Special Admit students. (At U.C. Davis, the Learning Center Director, Counselors and Academic Advisers test and screen special admit applicants.)

General Issues

Thomas Sowell*, a Black scholar at UCLA, discusses the net result generated by the 100% increase in Black students attending college in the last decade as a result of the special pressures on prestige and other institutions by social groups and governmental affirmative action demands. He states that demand was created for Black students at precisely those institutions least fitted to the student's educational preparation - i.e., prestigious research-oriented universities - so that it has created widespread problems of "underprepared" Black students at many institutions. Pointing out that although Black students' capabilities span the whole range of any standard used, he concludes that a mismatching of students with institutions has resulted.

> The Problem has not been approached in terms of the optimum distribution of Black students in the light of their preparation and interests but rather in terms of how Harvard, Berkeley or Antioch can do its part, maintain its leadership or fill its quotas.

The schools which have most rapidly increased their enrollments of Black students are those where the great majority of white Americans could not qualify. However, since these institutions do not admit underqualified white students, they have no "white problem".**

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*Sowell, Thomas, "The Plight of Black Students in the United States," in Slavery, Colonialism and Racism, Daedalus, Spring 1974.

**Institutions which do admit the children of white "blue collar" workers find they have many of the same characteristics as low SES minority students in terms of attitudinal problems and academic deficiencies.

"Much of the current literature attempts to convince prestige institutions that they should adapt to serve students who do not meet their highly specialized academic requirements - the possibility of distributing Black students in institutions whose normal standards they have already met has been almost totally ignored. Worse, many institutions have set up special programs to do the opposite to accommodate Black students who do not meet the normal standards of the respective institutions. Many government scholarships for minority undergraduates require academically substandard performance as well as lower socio-economic status. Black students themselves have said they are afraid to perform at their best for fear of reducing their chances for getting the financial aid they need to go to college.*" (Sowell)

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*NOTE: Isn't it time we began to re-think and re-establish academic merit and potential as the important factor in awarding financial aid to low income students or must this still be shunned as an "elitist" attitude?

On Double-Standards of Grading

The question of whether Black and other minority students receive sub-rosa special treatment at predominantly white colleges is still a controversial issue. Sowell* lists the many arguments and states that

> As for the prevalence of dishonest and clandestine double standards, its nature is such that it can only be estimated impressionalistically. My interviews with academics from coast to coast convince me that double standards are a fact of life on virtually every campus, but not necessarily in a majority of courses. This situation may in fact present the maximum academic danger to the Black student: enough double standards to give him a false sense of security and enough rigid standards courses to produce academic disasters.

The problem at Berkeley is that special-admit Black and other minority students tend to select the most popular majors, i.e., social science, business, etc., where they face the greatest competition from some of the most intellectually sophisticated and best prepared undergraduates in the country. If indeed, they are seeking out easier courses to fill their schedules so they can devote more of their efforts to those courses which are necessary to their major, then this would seem adaptive behavior - if, on the other hand, they are avoiding the more rigorous required courses and specializing in the less demanding courses, just to stay in school, in the long run they are the losers.**

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* Sowell, op.cit.

** My observation is that students at Berkeley do both, but the latter is more prevalent.

VIII. Faculty Fail Many Students Although They Give "F's" to Very Few

Although it is difficult to generalize about the Berkeley faculty as it is a diverse, individualistic group, studies on the characteristics of Berkeley faculty stress the fact that they enter University teaching through self-selection and University policy because they are primarily oriented toward research and graduate teaching. Often accused of being indifferent to undergraduate teaching, Trow feels a fairer generalization is that by and large faculty have a limited but genuine interest in undergraduate teaching.* They view research and graduate teaching usually as having a higher priority on their time and effort. On the other hand, Berkeley students value "individual personal development" as a major goal of their college experience, but this value is rated lower than other goals by faculty.**

From the students' viewpoint, faculty fail them in a number of ways (based on the problems expressed by the thousands of Berkeley students who have sought help from the Reading and Study Skills Service and the Student Learning Center):

1. Many faculty members have unrealistic expectations of the stages of intellectual development, and intellectual needs of undergraduates. Faculty tend to identify with students who have the intellectual qualities and values they themselves possessed

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* Trow, Martin (op. cit.)

** Peterson, Richard E. -- "Goals for California Higher Education: A Survey of 116 College Committees", Educational Testing Service, Princeton, New Jersey, 1973.

as students and graduate students provide the model against which they usually compare undergraduates.

2. Many faculty fail to describe the conceptual framework and assumptions in their discipline so that students become lost in an array of facts, details, and theories, and have great difficulty integrating these.

3. Many faculty fail to recognize that students either lack the conceptual background and information necessary for an understanding of their subject or that students are thinking in a different frame of reference.*

Some examples:

i) An engineering student taking his first economics course may not realize that the formulae in economics theory are mere metaphors in comparison with those he uses to solve civil engineering problems.

ii) A Subject A instructor asked her students to write a theme on a controversial topic. An athlete wrote a paper comparing and contrasting two swimming strokes and the instructor's comment was "That is not a controversy". The student replied that to his coach, that was a very controversial issue.

iii) I once failed a student on a junior level psychology examination question (Compare and contrast gestalt and association theory on the following ...) and commented on his paper "I do not understand what you are trying to say, please see me". The student was furious that I had given him an "F". When he came in he explained that he was emulating James Joyce's writing style and his Creative Writing Instructor was giving him A's, so what was wrong with me? I attempted to explain that the writing rituals in psychology are different from those of Joyce.

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* This is particularly interesting in light of the fact that a Harvard study analyzing final exam questions over the last fifty years showed that 75-80% of the questions required the student to consider the topic in more than one frame of reference. Although the instructor presents several frames of reference in his courses, he fails to recognize the diverse frames of reference and pluralism of his students. (Perry, William G. Jr., Forms of Intellectual and Ethical Development in the College Years: A Scheme, Holt, Rinehart and Winston, 1968.) (See Appendix E)

4. Many faculty fail to give clear assignments, ask questions that are confusing and unclear and require understandings and conceptualizations that are far above those merited by the course level and content.

5. Many faculty fail to establish clear criteria for grading and do not inform students of the performance standards they expect.

6. Many faculty fail to provide constructive feedback to students on their performance. Thus students do not know what to expect; they do not know what criteria will be used for grading nor are they able to judge their progress. A course which requires only one term paper at the end of the quarter creates great anxiety in students unless they have a clear idea of the level of complexity of the concepts on which they are expected to write and the acceptable style and format required. Often the only feedback and the student gets from the professor is a letter grade at the end of the quarter.

7. Faculty often fail to recognize how their instructional strategies and teaching methods affect student attitudes and performance in the course. Faculty who teach lower division courses in most disciplines require students to do little writing. Multiple-choice or short-answer questions are the most frequently used exam format. Even when longer essay questions are given, the skills required to earn a satisfactory grade are quite different from those demanded in writing a junior or senior research paper. In other words, lower division students generally get little practice in writing, except in the required reading-composition courses, English and rhetoric, and the organization, style and methods for developing evidence have minimal transfer effects on the writing demanded in other majors.

Students' perceptions vary and the instructor who announces "I have office hours M & W at 4, but do not bother me with trivial questions" finds very few freshmen seeking him out.

8. Faculty often fail to recognize, understand or deal with the differences between student backgrounds, interest in the subject and motivation.

Discussion:

Although students feel that faculty fail them in the many ways cited above (and some of those are legitimate complaints), the intellectual and ethical changes from adolescent to educated adult are difficult at best and often painful. The individual student to be successful is forced to think in new frames of reference, learn new concepts and internalize his own framework for evaluating and incorporating new information and ideas. Faculty who are deeply involved in their own theories and research sometimes forget the struggles and problems they themselves experienced as students. Although there appears to be no easy short-cuts nor panaceas to this process and some students will not be able to make the transition, faculty who are aware of the intellectual stages and ethical dilemmas faced by students can be patient and supportive without lowering their standards or goals.*

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* For more information on this subject see Perry's study on Harvard and Radcliffe students (1968) - (op. cit.)

IX Research on Problems of the "NEW" Students

The research* on the problems of the "new" student, a euphemism for low-income and minority students who are "first-generation" college students show that they share the follow characteristics:

1. Deficiencies in conventional academic skills (reading, writing and math.)
2. Lack of proficiency or practice in "thinking" approaches to problems.
3. Difficulties in working toward abstract goals or for symbolic rewards.
4. Strong leanings toward vocational or occupational goals rather than becoming scholars or researchers.
5. Bewilderment and feeling out of place at the onset of their college experience.
6. Limitations on freedom of choice on situation or program.

What doesn't work with the new students

The traditional remedial course is the least effective approach to working with "new" students. Some researchers point out clearly that it is the worst. Why? There is very little evidence that the standard remedial course improves the skills it aims to change. (Most studies, in fact, conclude that it does not.) That such programs produce no significant changes on objective measures of scholastic achievement is by far the most frequent result reported in most studies. Furthermore, there is evidence that it kills student motivation.*

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* Klingelhofer, Edwin L. and Lynne Hollander, "Educational Characteristics and Needs of New Students: A Review of the Literature." Center for Research and Development in High Education, University of California, Berkeley, 1973.

What does work

In general, programs that are most effective with the "new students" provide the student with success experiences, intrinsically interesting materials and personalized study programs to fit individual needs. Cross* (1971) who has made the most intensive study of these students and programs recommends that programs concentrate on the students' strengths and aim at the attainment of excellence in one sphere of activity.

Only at UC are students who were successful in high school with GPA's above 3.1; successful in the eyes of their teachers, parents and friends, subjected to the humiliation and stigma of being required to take a "remedial writing course" in college and charged** for the experience. They react in the expected fashion; instructors complain about poor attendance, failure to keep up with assignments, poor attitudes and expressions of hostility toward the instructors and the system.

When experiments have been tried on other UC campuses (e.g., UC Santa Cruz and San Diego where writing courses are offered for full credit and without fee), the results are dramatically different. In 1969-70, Santa Cruz offered a writing course for credit and without fee in four of their

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* Cross, K.P., Beyond the Open Door: New Students to Higher Education, San Francisco, Jossey-Bass, 1971.

**Although many arguments have been raised against the $45 Subject A fee, it is most frequently criticized as placing an additional cost burden on low-income students. I disagree. Low-income students, athletes and veterans have their college costs paid through scholarships, grants and other financial aid. The fee penalizes the middle class student whose parents are supporting him/her; or the students who are working their way through college in two ways: 1) Directly, if they are held for the course and 2) indirectly even if they are not required to take the course since the major portion of the $100 per quarter Ed. Fee they must pay goes for financial aid for the disadvantaged students who are most likely to be held for Subject A.

colleges; two colleges followed the standard Subject A route. Offered a "genuine" course (i.e., course for full credit), student attitudes changed so that "they worked hard and usually made steady progress during ten weeks of intensive writing practice".*

The standard Subject A classes suffered from the same demoralizing experiences of poor attendance, inattentive students, etc. The negative self-fulfilling prophecy won again. (See description of UCSD Third and Fourth College Writing Programs in the Section on Subject A. Also Turner-Martin Report, 1972.)

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* Izaak, Georg W., Survey of Compositional Instruction in the Department of English at University of Davis, U.C. Davis. No date (Circa 1974)

X What do other institutions do with students who lack the basic foundations for college work?

Some Administrative Models

1. Separate "holding college or department"

Prompted by a state law which required it to admit all State high school graduates, the University of Minnesota established a separate college, the "General College" as an open-admissions college on the campus in the 1930's. Although the college has a limit on the number of students it may admit and thus must make its admissions decisions on the basis of a lottery, all Minnesota residents who do not qualify for admissions to the regular "College of Liberal Arts" are eligible for admission. The General College grading system is different than the grading system in regular University courses, however, students, if they earned satisfactory grades, can transfer to regular college departments and gain full or partial credit for courses they took in the General College.

In the late forties, Penn. State, faced with a similar problem, funded a "Counseling College" for students admitted on probation where students could take regular college credit courses and receive special counseling, advising, skills help and tutoring. Students remained in the Counseling College until they earned grades and credits that would enable them to transfer to the college of their choice. The University of Maryland instituted a similar program in 1948 which lasted 12 years.

Advantages:

Under the "holding" college concept, students can be sheltered, carefully advised, tutored, counseled and required to take reading and study skills improvement courses, etc. Their courseloads can be limited and

individuals followed carefully, depending on the number of students and staffing.

Disadvantages:

Inevitably, such a "holding college or department" develops the stigma of a "dummy college". (e.g., University of Minnesota students refer to the General College as Nicholson High School since its classes are held in Nicholson Hall.)

The academic support services including tutoring and counseling can be quite expensive to the institution, and students are often more reluctant about using them than general college services. (This depends a great deal on the staff, however, most of the support services in the program of this sort that I have evaluated or worked in have been over-staffed and underutilized by students.)

The advisers and counselors must be knowledgeable about the requirements of all of the university's colleges and departments and must be able to negotiate well with deans and department heads so that individual students may be accepted as transfers. Faculty members may consider the program over-protective and sometimes resent "outside advisers".

2. Special Pre-college Summer Sessions or Summer Bridge Programs

As the number of poorly qualified college applicants increased in the fifties and sixties, many institutions found the "holding college" approach too costly. Instructors were hired on an annual basis for freshman courses and because of the high student drop-out rate, departments were over-staffed during spring semesters. Dormitories were crowded in the fall and some had

to be closed for lack of roomers in the spring.

As a result a number of institutions developed summer pre-college programs for entering freshmen and special programs like Upward Bound had summer sessions for both high school juniors and seniors.

Since 1961 all students applying for admission whose H.S. GPA's were below 2.0 have been required to attend the Pre-College Summer Session at the University of Maryland. Students enrolled in two regular college courses, English 1 and a social science or mathematics course (for prospective engineers). The English class enrollment was limited to 15 students per session and instructors met with each student for a half hour conference per week. Sociology and government classes averaged 25 students and in addition, counseling and reading and study skills services were scheduled for each student daily.

Advantages:

The summer program provides the student with direct experience in college courses so each can appraise his capability to do college level work; gives the student the opportunity to improve his educational skills and to explore realistic educational-vocational goals with professional counselor per 30 students and one reading specialist per 55 students, the costs of the program were lower than the "holding college".

The total number of students entering the University of Maryland with poor backgrounds was reduced - i.e., out of 7752 applicants required to take the program over a 7 year period, 3425 (or 44%) registered for the summer session and 1613 (or 21%) earned grades high enough to enable them to register in the Fall.

Both Berkeley and Davis have had similar Summer Bridge Programs for entering EOP students for a number of years. During the past two summers, these programs have not filled (i.e., this summer Berkeley's program attracted 43 students of an anticipated 75). At Berkeley, the Bridge students take Subject A, and Math PS (if required), attended a reading and study skills mini-course and SLC's Chem P program (if they were planning to major in science) and received counseling services.

The Davis program offers counseling, a reading and study skills course, a non-credit math & English courses. Students also enroll in one summer school course for credit.

Disadvantages:

Students find the 8-week summer program difficult because it is faster paced than the 10-week quarter, however, student evaluations of both UCB and UCD programs have been positive.

Fewer special action students enroll in these programs than regular EOP students - probably because the Admissions Office processes and accepts special action students later than regular admits (i.e., up to July 1).

The survival rate of Berkeley 1973 EOP Bridge Students was about the same as other EOP groups - i.e., 83% remained at the University for three quarters although 16% were in academic difficulty (GPA's below 2.0). 58% remained through 5 quarters.*

* Maxwell, Martha - Summary of Follow-up Study of 50 EOP Summer Bridge Students admitted in Summer 1973 - UCB.

3. Dean of Freshman Studies (or Dean of Lower Division Studies)

Another model used at many institutions (including Dartmouth and Stanford) is to have one administrative officer within the college responsible for coordinating a program which encompasses courses, recruitment, advising, registering, etc. for freshmen in general and supervision of the advisers specifically assigned to Special Admit Students. The advantage of this model is that it avoids to a great extent, the stigma students feel by being placed in a separate college and the problems of having two separate administrators, yet allows the college to keep a tighter rein on the student's study load, grades, etc. Turning such students loose as if they were just like every other student and could work with any adviser, I feel, is a mistake. They should be admitted to the University provisionally and have a clear understanding of what they must accomplish in units and grades to achieve regular status. Also this office could coordinate with educational and career planning services, learning center, counseling, etc.

Another advantage of the Dean of Freshman Studies (or equivalent) position is that it can expedite innovative teaching and course development since it cuts across departmental lines. Often this has led to creating new courses and programs that are more responsive to the specific needs of freshmen.*

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* Note: Since the majority of Special Admit students at Berkeley are enrolled in L & S which has a number of lower division advisers under R. Kihara, and the number of freshmen and sophomore Special Admit students are relatively small, it would require minimal additional staffing for special advisers.

"Model Programs"

Ten post-secondary institutions were selected by NIE this summer as having the best programs for low income, educationally disadvantaged students.* All have highly structured, required programs, provide intensive tutoring, and other support services and admit small numbers of students per year i.e., 29-100 (with the exception of those institutions where the majority of the student body had below "C" averages in high school.)

Other characteristics of these programs are:

1. Intensive recruitment and follow-up pre-admission contacts with small groups and individuals.

2. Pre-college advising so that students had some idea of their major field or area prior to enrolling.

3. Required summer programs including orientation, required reading and study skills, tutoring, review courses, career, personal and social counseling and advisement.

4. Required tutoring (from 3 to 8 hours per week) and required contacts with advisers throughout the college years.

5. Special Courses and Curricular Modifications - these range from 11 non-credit review courses (Bronx C.C.) to Precision College Teaching with a computer-managed feedback system as an alternative to traditional instruction plus a non-punitive grading system (i.e., if a student fails to meet the criteria, he gets additional help and tries again until he reaches the criteria.) (U. Florida) Most of the programs stated they had heavy involvement and acceptance by faculty.

6. Some include post-baccalaureate counseling and direct work with community agencies, peer advisers, etc.

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* The ten institutions selected included: four-year colleges, California State University, Fullerton, Marquette University, and St. Edwards University. Others included Bronx Community College, Institute for Services to Education, Malcolm-King: Harlem College Extension, Oscar Rose Community College, Southeastern Community College and Staten Island Community College. Source: National Project II: Alternatives to the Revolving Door, Richard A. Donovan, Project Director, Aug. 1975.

Note: Bronx Community College enrolled 12,200 students in 1973, 75% of them had graduated having below high school averages, with family incomes below $12,000. 50% were reading below the 11th grade level and given special reading courses; about 50% were given special writing courses and 25% were given both reading and writing courses.

4. New Practices

Currently a number of Universities are dropping the freshman English requirement having found that it does little to improve the later writing of undergraduates. Specifically, the University of Washington and the University of Denver do not require freshman English. They find that a general college writing course open to any student from freshman to senior is a more effective method of ensuring adequate writing proficiency. Writing courses at the junior and senior level offered by departments rather than English or Literature Departments also are gaining support in many schools. In these, the student can gain the skills he or she needs to succeed in their specific majors. It seems unreasonable to expect that Subject A instructors can teach freshmen to write engineering research reports. In fact, how can freshman engineers write engineering reports without the conceptual knowledge of basic engineering courses? (Note: Berkeley's Engineering Department does offer an upper division course in engineering report writing: Engr. 190.)

Nor can the basic skills taught in Subject A guarantee that a Social Welfare major can write an adequate case study when called upon to do so three years later, or a psychology major write an adequate description of a psychological experiment he has run. Hopefully, what Subject A courses can do is to help the student learn standard English grammar, punctuation, and basic composition principles. However, many students who recognize that they need help in writing, do not see Subject A as a course which will help them improve their writing.

5. Ingredients of an optimal program

Assumptions:

1. 18 year olds are legally adults (in the State of California) and should

be permitted to make choices and be given sufficient information about their own capabilities and the requirements of the University to enable them to make intelligent decisions, and choose among options.

Attending the University should be the student's free choice and based on a clear understanding of the requirements and risks involved. Attending college should not be considered mandatory, but a matter of choice and should not be unduly influenced by extraneous factors — i.e., if students choose to come to Berkeley merely because the financial aid package Berkeley offers is better than that offered by a junior college, and many do, they may have more difficulty in accepting the academic demands and accomplishing the work required.

Students should be appraised early of any academic deficiencies that may prevent their college success and the responsibility for remedying these, preferably before coming to the University, should be that of the student. (See Figure 1)

The ideal program would offer credit courses to students rather than non-credit or partial-credit courses labeled "remedial". Strong academic support services including tutoring and skills works and other services provided by the Student Learning Center should be available without credit and on a voluntary basis. (See Figure 2 and 3)

If it is deemed necessary to accept increased numbers of Special Admit students who do not meet even the barest minimum requirements, they should be required to attend a summer Bridge Program where counseling, advising, review courses and intensive work in reading, writing and study skills are provided.* U.C. Davis Summer Enrichment Program which includes reading and

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* The present Admissions Office deadline of July 1 for accepting Special Admits effectively excludes a summer program for these students. They are not notified of their acceptance until after summer school starts and by that time most are employed in summer jobs.

MODEL FOR AN ALTERNATIVE TO PRESENT SYSTEM

Figure 1

Early Information to Students regarding University Requirements

H.S. Juniors take PSAT - should be clearly informed of university requirements in writing, reading, math., chem., etc.

(Younger students should be given information too!)

Early Warning System

→ Prospective students should be given suggestions encouraging them to improve skills, i.e., intensive high school courses, adult school, junior college and other summer school programs

→ 1) Seniors applying to U.C. should be notified again of univ. requirements and their needs (SAT cut-offs, Subject A Diagnostic Test, etc.) to enable them to prepare before arriving.

2) Special Admits should be identified by Admissions early and notified of required Summer Threshold Program, needs for remediation in math., English, etc.

→ Summer Bridge Program required for Special Admits and EOP students who meet univ. entrance requirements, but come from academically weak high schools.

Attendance optional for other students.

Program:

Subj. A. or equivalent review in grammar & composition.
Math. review (preferably Math PS)
Chem. P or PS (for prospective science majors)
Reading & Study Skills (group and individual program)
Counseling & Advising
(Option of taking one other summer course for credit if doesn't need one of the above courses.

FALL

1) Students showing adequate performance on courses in Summer Threshold Program should be provisionally admitted to colleges of their choice.

2) Encouraged to take a reduced courseload and use academic support services (including SLC, Counseling & Advising.

3) Enrolled in regular full-credit courses.

(Subject A could be offered as an elective to any student)

4) If student's academic performance in Summer Bridge Program is poor, then redirected to community college.

MM:md/9.12.75/

study skills counseling, math and English non-credit review courses plus one summer course for credit (the course is chosen by the student) and the UCB EOP Bridge Programs are examples. Attendance at such a summer program should be open to other students who want to get a head-start on college.

There should be more writing courses available for all undergraduates, particularly at the upper-division level. (English 143 - Advanced Expository Writing, Engineering 190 and the various writing courses offered by the Afro-American Studies Department including pre-legal writing are examples of courses that could meet the needs of upper-division students who have grammar and composition skills but need more sophisticated writing skills and should be available in more departments.)

These recommendations assume that the faculty are setting reasonable writing and reading standards in all of their courses, providing adequate feedback to students on their proficiencies and needs and recognize the developmental nature of the reading and writing process.

Ideas for the University's Involvement in a College Preparatory Program

Getting information to students about the courses and nature of college early enough to help them prepare for college and make realistic decisions about attending the University is a great problem. The Martyn Report of 1968 and the Tillery, et al. SCOPE study showed that as many as 80% of minority high school seniors in California wanted more information about college courses and the nature of college programs.

Although additional funding would be needed to implement any of the following suggestions, they might be considered:

> Bringing small groups (10-15) of high school (and even Junior High students) to the campus for an Orientation to College Learning. Such a program would involve the efforts of academic departments (especially Subject A, Math., Chemistry, etc.), the Student Affairs Units - i.e., the Student Learning Center on how to study, the Counseling Center on educational planning, ORS, SIR, etc.). Undergraduate students could be hired as group leaders (ála the CALSO program.)
>
> This could be arranged in different ways (in fact, it would be interesting to evaluate the effects of different methods on the

recruitment of different target groups (i.e., Chicanos, Blacks, etc.)

a. A series of Saturday programs (10-4). Upon completion of the series, students would be given a Certificate (similar to the program UC Extension is running with Japanese high school students.)

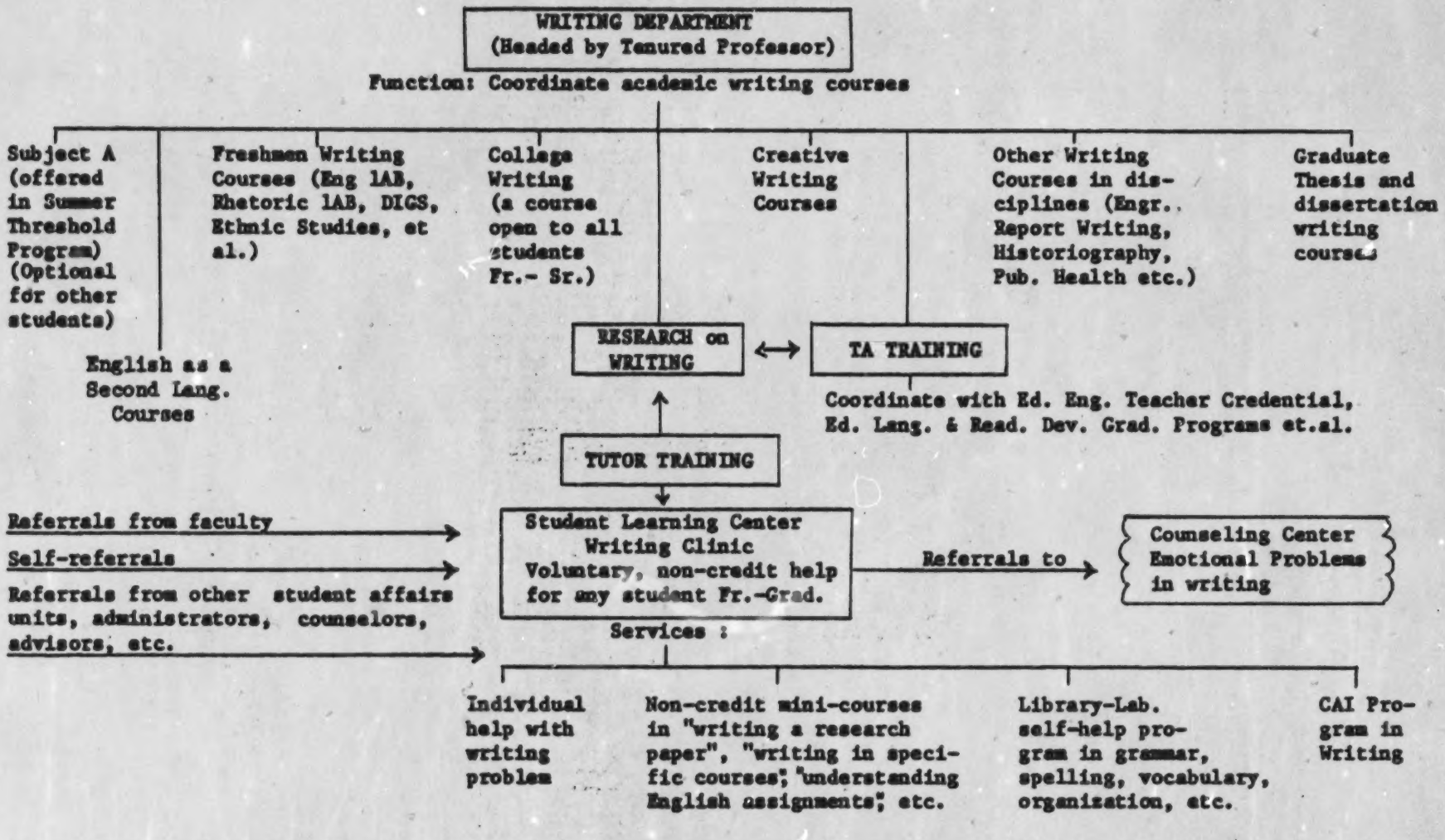
b. Setting up "Learning Societies" within the high school where students planning to come to the University who had completed the program described above not only would develop an identification with the University, but also encourage other students to join in.

c. Holding such a program during the week and arranging for social science or English classes to attend as part of their regular curriculum - as a unit in learning about the University or learning about the skills needed for successful college work or both.

Since the majority of minority students attending the University come from high schools in the Bay Area, this kind of program might be feasible to arrange through principals and high school counselors.

[A Model based partially on the UCSD Proposal and recommendations of the Turner CEP Report, 1972]

Figure 2


WRITING DEPARTMENT
(Headed by Tenured Professor)
Function: Coordinate academic writing courses
Subject A (offered in Summer Threshold Program) (Optional for other students)
Freshmen Writing Courses (Eng 1AB, Rhetoric 1AB, DIGS, Ethnic Studies, et al.)
College Writing (a course open to all students Fr.- Sr.)
Creative Writing Courses
Other Writing Courses in disciplines (Engr., Report Writing, Historiography, Pub. Health etc.)
Graduate Thesis and dissertation writing courses
English as a Second Lang. Courses
RESEARCH on WRITING
TA TRAINING
Coordinate with Ed. Eng. Teacher Credential, Ed. Lang. & Read. Dev. Grad. Programs et.al.
TUTOR TRAINING
Referrals from faculty
Self-referrals
Referrals from other student affairs units, administrators, counselors, advisors, etc.
Student Learning Center
Writing Clinic
Voluntary, non-credit help for any student Fr.-Grad.
Referrals to
Counseling Center
Emotional Problems in writing
Services :
Individual help with writing problem
Non-credit mini-courses in "writing a research paper", "writing in specific courses", "understanding English assignments", etc.
Library-Lab. self-help program in grammar, spelling, vocabulary, organization, etc.
CAI Program in Writing

Present SLC FTE (9 months)

Writing Specialists - 3 FTE, + 197 Tutors for credit and volunteers
(Most of present FTE work with students in Sub. A, Eng. 1, Rh. 1.)

Future FTE needs for SLC (9 months)

Two more FTE to work with advanced undergraduate and graduate students.

MODEL of MATHEMATICS PROGRAM

Figure 3

Department of Mathematics

Academic Review Courses:

Math P Math PS Math 6 A & B (and/or a full credit course in College Algebra and Trigonometry)

(needed: an optional Self-paced Freshman Course in Math 16A B.)

↓

Student Learning Center's Math. Program - Voluntary, Non-credit

Services:

- Mathematics Tutor training
- Individual tutoring in Mathematics
- Group tutoring and review sessions in Freshmen Math. courses
- Non-credit mini-courses: Algebra Trig., Stat. concepts. Non-credit Math PS. Math. review for GRE & Professional Exams. Math. review for Chem. & Physical sciences
- Self-help programs in algebra, calculus etc. in Library-Lab. plus lower division mathematics book collection
- CAI Program in algebra, trig., statistics.

NOTE: At present SLC has enough Math. FTE to provide adequate Math services to students, however, one FTE is needed to develop CAI programs.

6. Specific Administrative Actions that Might be Taken To Ameliorate the Problem

Early notification to prospective students of the importance of reading and writing skills requirements in college work. If the UCB Admissions Office notified freshman applicants when they apply or better still when they take the PSAT as juniors that if their CEEB English Scores are below 600, they should take additional high school reading and writing courses, adult school or junior college summer courses, students would have adequate time (almost a year) to build up their writing skills before taking the Subject A Exam. The UCLA Admissions office does this, UCB Admissions Office does not. Similar information could be given to students with math deficiencies and those lacking the background for Chem. 1.

Note: Professor Kelley, Chairman of the Mathematics Department states that high school students need to be better informed and advised concerning their options so they can select the appropriate courses in the array of mathematics courses offered by the department. Many entering students do not understand the options.

Admission Contracts. If the College Deans would set criteria so that students applying for admission to UCB who lack background courses or have deficiencies revealed by high school records or tests could be guaranteed admission if and when they complete X specific courses with Y grades at an accredited junior college, then we might attract better prepared JC transfers. A number of institutions including UCLA have such a program. UCB does not. At Berkeley, many applicants are re-directed to junior colleges, but have to reapply and take the chance of being rejected when they have completed junior college work if the department or college they wish to enter is filled.

Special Admits. If the administration continues to admit athletes, EOP students and others whose applications have not been reviewed by the Special Admit Committee and/or who, in the professional opinion of the Admissions

Officers, need intensive college preparatory work before undertaking freshman courses, then additional money must be provided for academic support services for these students. For example, last month the Chancellor admitted 11 athletes who fall in this category. Based on our past experience, these 11 students will need intensive tutoring and could easily consume more than half of the $10,000 allocated to the Student Learning Center for athletic tutoring this year. Even then, SLC staff have found that despite intensive individual tutoring (up to as much as 120 hours per course per quarter) some Special Admit students are not able to pass Subject A, freshman Chemistry or Math.

One suggestion for meeting this problem:

The Student Learning Center and Subject A Department are considering a special section of Subject A to be offered by SLC staff this fall, for athletes whose grammar, writing and reading deficiencies are so great that they will not be able to handle the regular Subject A course work. This course will require that each student make a contract with the instructor to complete appropriate grammar, reading, vocabulary and spelling and writing exercises in the Center's Library-Lab as well as class sessions. The materials assignments and exercises will be geared to the students' needs and interests.

Review of the Criteria for Placing Students on Probation and Dismissal.

Since average grades have increased from "C" to "B" over the past decade, (See Appendix A) yet regulations for dismissal and probation have remained the same, it seems appropriate to reexamine these criteria. (OAR is presently working on a study of L & S dismissals.) The question that should be raised is whether it is rational or humane to permit students to remain at the University for 3 quarters when they have no chance of succeeding and then drop

out (as has happened to between 30% and 45% of the EOP Special Admits.)

Minimum Reading, Writing and Math Skills Should be Required of all Students at Entrance.

Students, even Special Admits, should be able to read and write at an eighth grade level and have mastered fundamental arithmetic skills and basic algebraic concepts. If they have not learned these by the time they graduate from high sch-ol, most free adult school and community college programs offer these skills courses.

The major role of the Student Learning Center should be to assist those students who have the potential to succeed and can profit the most from the assistance provided.

I do not see the University's function to be one of offering basic elementary and junior high skills and subjects. It is too costly and too time consuming for both staff and students. If the administration continues to admit students with minimal academic skills, then we need to face the reality of providing intense help for this sub-group.

Lack of Data Base for Decision Making and Evaluation of Programs.

The data base on student characteristics needed for administrative educational and policy decision-making and planning is lacking. Although there are literally tons of statistical reports and studies on Berkeley students collected by the Office of Institutional Research and various departments, much of this data is directed to answer questions on fiscal accountability (class size, workload measures, etc.) What is lacking is baseline data for educational planning on the retention and attrition of Berkeley students, particularly selected target groups* (i.e., Special Admit students, junior

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* OAR and Austin Frank are beginning longitudinal studies on some of these groups.

college transfers in different majors, students of varying backgrounds and abilities, etc.) Without such data, it is possible neither to assess existing programs nor evaluate future innovative programs. For example, there is virtually no data on the survival rates of EOP students except for two studies, each on less than 50 students; OAR did not begin keeping systematic records on Special Action students until 1973, etc.

Changing Admissions Requirements

There is also a great need to re-examine college curricular assumptions as UC admissions requirements and the content of high school courses change. The over-inflation of high school grades may also affect the preparation of students we currently admit. The national decline in reading and writing scores of entering college students has prompted some colleges (i.e., Michigan State English Department) to revise their freshman English courses to emphasize basic reading skills as well as the traditional "literature". Other institutions, like Brown University, have substituted courses "Semi-Otics" (using media, pictures, etc. for communicating ideas for traditional composition courses.)

XI SUMMARY

Berkeley still retains limited credit "remedial courses" despite the fact that other institutions dropped the label decades ago. The perjorative implications of and stigma attached to the term "remedial" have negative effects on student attitudes and performance. Probably these courses are retained because of traditional faculty attitudes of the incompetency and limitations of undergraduates and the increasing but small numbers of educationally disadvantaged and poorly prepared students being admitted exacerbate and reinforce these attitudes.

Several models are described as alternatives to the present administrative structure including 1) a "holding" college, 2) summer pre-college "Bridge" session, 3) Dean of Freshman or lower division studies, 4) new and optimal programs, and 5) pre-college preparation and orientation program.

The questions raised by this report include:

a) The problem of academic standards - why are grades continuing to rise each year as the numbers of poorly qualified students admitted are increasing?

b) If enrollments in "remedial" courses in math. and Subject A continue to increase, what will happen to FTE in departments where traditional courses are offered if enrollments decline and how will the costs of remedial courses be absorbed?

c) Why cannot students be granted full credit for basic required courses in writing and math. with exceptions granted for high achieving students and a summer Bridge program with increased academic support services provided to students who need more intensive help than these courses can provide? College Algebra

courses are still offered for full college credit at most colleges and universities; yet at Berkeley, we expect liberal arts students to take a required calculus course although most have not had algebra since 8th or 9th grade and label them remedial if they need a review course.

d) Experiments at other institutions with similar problems have shown that students normally held for Subject A can be successfully absorbed in regular required freshman English or writing courses, and when this has been done, they work harder, and have better attitudes as a result of gaining adequate credit and not paying a fee. Why cannot this be tried on a larger scale at Berkeley? (Presently it is limited to Asian American Studies, Strawberry College and DIGS.) The correlation between passing Subject A and passing English 1A or equivalent appears to be high. Might they not be both teaching the same skills?

e) What can be done about sensitizing more faculty members to their responsibilities in helping students express their ideas and concepts within the constraints of their special academic discipline? Although faculty have severe constraints on their time which limit them in working individually with students, don't they still have the responsibility for providing constructive feedback on the students' writing ability and assisting them in developing progressively higher level writing as well as cognitive skills?

f) Why cannot more sophomore and upper-division writing courses be established within departments and offered to students who need advanced skills to produce papers and reports in their majors? (e.g., Prof. Stroud's English 142E - Advanced Expository Prose: Report Writing for non- English majors; Engineering 190 - Engineering Report Writing; the new courses offered by the Afro-American Studies Department, especially AAS 3 - Exposition and Argument, described as "continued instruction composition with intensive practice in the techniques of argument and exposition of themes in Afro-American life and culture" and the experimental course in Pre-legal writing.)

g) If faculty are not able to spend the time with individual students or modify their course requirements to include more emphasis on basic skills, should not they be cognizant and supportive of resources on campus which can help students? At this point the Student Learning Center's resources are stretched to the maximum, so that we are unable to meet current student demand for service.

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Appendix A

Spring Quarter GPA's of Freshmen over a Decade

	% of Students with GPA's	
	Below C	B or Higher
1964	23.7 %	19.3 %
1965	21.8	21.4
1966	21.6	23.0
1967	13.9	26.5
1968	13.0	30.6
1969	11.4	35.0
1970	10.8	40.5
1971	8.6	44.1
1972	7.1	46.3
1973	7.2	48.7
1974	5.4	52.0

(Data Source: Office of Institutional Research)

The data above show clearly the steady and consistent increase in the proportion of Freshmen earning B or higher averages and the decrease in those earning C or lower averages over the past decade. B has replaced C as the average grade.

Historical Data on Grades and SAT Scores

The rise in freshmen GPA's during the past decade despite declining SAT scores is particularly interesting in contrast to earlier studies on the inflexibility of grades of Berkeley Freshmen. Report on Methods of Evaluating Students, at the University of California at Berkeley, October 1965, p. 13.

"One of the important findings of this broadly based study involved the fact that students seemed to be graded with quite different criteria by their teachers both in high school and college. Also, whether or not students as a whole have improved academically in terms of knowledge, their grades have changed little. While one would expect better performance to be revealed in higher grades, this did not occur... "The following chart relates to the freshmen who matriculated on the University of California Campus at Berkeley between the years 1947 and 1960.

	Verbal SAT	Math SAT	HS GPA	UC GPA*
Male (1947)	491	508	3.32	2.34
Male (1960)	557	595	3.45	2.34
Female (1947)	483	411	3.40	2.34
Female (1960)	543	518	3.51	2.34

While SAT scores jumped anywhere from 50 to over 100 points during this period of time and entering high school grades improved somewhat, the average grades received at the University did not improve. Taking only the scores of the male students entering the University, it is to be noted that their performance on the SAT in Math increased 15% and on the SAT Verbal increased 12%, their high school grades only increased 4%. In other words, there was little apparent recognition in their own high schools of the changing performance standards. This is particularly discouraging for a student in one school who does good work, but receives only average grade recognition, while a student from another school who is equal in ability receives an excellent grade. If both these students apply to the same school and have similar SAT scores, there is no doubt which will be chosen. Similarly, at Berkeley the grades have gone virtually unchanged over the thirteen-year period of the study. One question: whether grading is being done on the basis of excellence. Either this is not the case or there is a dramatic decrease in the level of student motivation during this period at the University."

Quote from Kirschenbaum, Howard, et. al. Wad-ja-get? The Grading Game in American Education, Hart Publishing Co., New York, 1971.

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* Compare these with 1974 Berkeley Freshman --

	Verbal	Math	GPA
Male	541	623	2.95
Female	526	558	

Remedial Courses at UCB
Descriptions, Enrollment Figures, Problems and Comparison with Other Campuses

Subject A

Subject A is an old and accepted Berkeley institution. Faculty, dissatisfied with the high school training in "Oral and Written Expression" of applicants created a separate Subject A in which high schools were expected to certificate students in 1898.* Students applying for admission without high school certification were required to take a written exam in Subject A and if they failed, required to take a non-credit course in elementary composition. In 1905, all applicants were required to take the Subject A examination and two years later, after high school principals protested, the requirement was dropped and a period of "confusion and controversy ensued." A Subject X was instituted but by 1922, Subject A was firmly established and the Board of Regents instituted a fee of $10 for it. Gradually the fee was increased and in 1965, it was raised to $45.

In 1972, the Turner-Martin Report describes the role of Subject A as follows:

> "Subject A has been given the enormous burden of 1) preserving a high (i.e., university) level of literacy in society; 2) preparing students to work at a high verbal level in other university courses; and 3) introducing students to the kind of communication in which university work is performed. These include in San Diego's terms, both the "complex competence required by society and the university, and the 'literacy level' which, at its minimum will allow for communication in one mode of language, used at the university and elsewhere."

AND ACCOMPLISH ALL OF THESE GOALS IN TEN WEEKS??

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* Turner-Martin, Report to the Academic Senate on Subject A, U.C, 1972. Note: Another source states that the oral and written expression course was inadvertantly left out of the catalogue proofs and when the omission was found by the editor, he christened the course Subject A in 1898.

Although strenuous efforts were mounted to eliminate the $45 fee in 1974-5 and approved by the Board of Regents, the recommendation was rejected by the Legislative Analyst and the fee remains. This Fall the cut-off score has been raised to 600 on the CEEB English Test and it is anticipated that 70% of entering UCB students will be held for the Subject A Diagnostic Test.

Subject A varies from campus to campus although only Berkeley and San Diego grant credit for it.* In general, Subject A classes are limited to 25 students, a heavier student ratio than English 1 A-B where the maximum class size is 17 and professors have the services of a TA, while Subject A Associates have no TA help.** (See Table 1 for outline of Subject A at different UC campuses.)

The Student Learning Center provides two tutors for the Subject A Department and a number of ED-197 students (tutors for credit).

Subject A on the Other UC Campuses (See Table 1)

Note: This fall several UC campuses are planning special intensive pre-Subject A courses for students whose test results indicate they will have extreme difficulty in completing the Subject A requirement in one quarter. UC Davis plans an intensive pre-Subject A course for 15 bi-lingual students. who are not eligible for the EPS course. Subject B -- an experimental project run by UCLA's AAP last year originally planned small sections (15 instead of 25) for EOP students "with no hope of passing Subject A in one quarter." They over-estimated the potential enrollment and when EOP students did not enroll, took students from the regular Subject A sections. Subject B will not be continued in 1975-6. Instead, UCLA's Subject A Department has

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* Berkeley grants 2 credits when a student passes the Subject A course. San Diego's English/Literature 10 course, which is equivalent, grants up to 4 credits if a student needs more than one quarter's work and charges no fee. Some UCSD colleges provide other full credit, non-fee alternatives to Subject A.

** Briefing paper-Legislative Hearings on Subject A. (Circa 1974)

Note: These figures appear to be averages and vary within departments and between campuses.

obtained Regents' funding and will be offering special small classes for students who need intensive help this fall.

Berkeley's Subject A Department has been identifying students who need intensive help, and placing them in special sections for several years. This fall, the Student Learning Center, with the approval of the Subject A Department, may offer a non-credit Subject A course for athletes who need basic grammar skills, spelling, writing and reading. (This program will be less costly for the SLC than providing the intensive individual tutoring these students will need if they take the regular Subject A course.)

Subject A Problems

Increasing the College Board Subject A cut-off score to 600 is a misguided decision since it will not only increase the workload on the already over-burdened and under-funded Subject A Departments, but also increase the numbers of angry students who must take the exam, be held for the course and required to pay the fee.

a) There is no empirical evidence that success in the Subject A course, nor English 1 for that matter, increases the student's writing proficiency in advanced courses. There is some evidence, however, that EOP students who pass Subject A generally pass English 1-A or the equivalent composition course.* However, many go on to fail English 1-B, or make D's and F's in social science breadth requirements.**

b) The Grade-Point-Averages of Berkeley Freshmen are higher than they have ever been. The number of students on L & S probation is not

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*Maxwell, Martha, "A Follow-up of the EOP Summer Bridge Students of 1973", Student Learning Center, U.C.B., 1975

**Maxwell, Martha and Ellen Chase, "Profile of the Successful EOP Special Admit" (Study in progress)

increasing (in fact appears to be declining). Thus, although we are denying that students have more writing problems today, this is not reflected in their grades. Subject A appears to be the scape goat for the faculty's frustration with student writing and the recipient of the students' anger at being labeled "inferior".

As Adela Karliner of U.C. San Diego so succinctly describes it:

> "The teaching of composition is universally acknowledged to be difficult. There are no easy answers and no panaceas. What has been found to work is expensive: a low ratio of students to instructors and good, experienced instructors who have as their main commitment the teaching of composition. Even a massive infusion of money intelligently used to attain these objectives, however, will not provide a miracle. Writing competently is a skill which needs continued reinforcement. It is impossible to expect that one or two quarters in the freshmen year will make good writers out of students who have never written before and who will not be required to write again in their college careers. If professors require little or no writing, award A's to poor writers when they do require a paper, and provide no constructive feedback when writing is found to be inadequate, then it is foolish to expect that most undergraduates will develop their writing skills further from their Freshman year to the time of graduation. I think undergraduates at UCSD want more opportunities to work on their writing, and if nothing else, more general writing courses should be available for Freshmen, Sophomores, Juniors, and Seniors."

Alternatives to Subject A

One required writing course for all freshmen with no fees and no special sections - full credit given for students who pass the course. Students who score high on placement tests are exempt or are placed in Honors sections*.

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*If we continue to admit students who are very deficient in basic grammar and composition skills, then 1) they should be identified early (preferably when they apply to the University and encouraged to take additional high school, adult school or junior college courses and/or require them to attend a Threshold Summer program which would require an intensive Subject A type course as well as a reading and study skills program, math. etc.

Furthermore, they would need additional academic support services (tutoring and skills) as they began the regular freshman curriculum.

(This is the model that has been used at Harvard for many years -- i.e. a course called Gen. Ed. AHF, introduced in the 1940's).

Also U.C. San Diego's Fourth College requires that all students take a two quarter writing course (Fourth College 10A/B, 4 credits are given for each). Enrollment in 1974-5 was estimated at 500. Students who are normally held for Subject A take this course for credit and without fee.

U.C. San Diego's Third College requires all students to take a Third College Composition Placement Test in September which places them in one of three proficiency groups: those in the lowest proficiency group take the Third College Composition Course in the fall. Others take the course in the winter or spring quarters. High scorers on the advanced placement test are exempted from the course which is a one quarter minimum breadth requirement in reading and composition. Students held for Subject A take this course without fee and can earn 4 credits (Note: "Students who need two quarters of work have averaged 30% over the last 3 years" according to John Waterhouse*, Director of the program.). Enrollment was over 250 in 1972-3, 140 in 1973-4 and estimated at 350 in 1974-5. Classes are small (12 students) meet twice a week and each student meets with his/her instructor for a weekly half-hour conference.

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*Waterhouse's program is envied by other Subject A Departments for its low student-faculty ratio, the fact that students take it for credit and without fees. This summer Waterhouse has a grant to evaluate the course and prepare a resource text for instructors. The course will be offered this Fall on the same basis it was in the past.

Table I

SUBJECT A ON THE DIFFERENT UC CAMPUSES

(Fall 1975)

Campus	Fee	Credit	Course Name	Administration	Fall 1974 Enrollment	Options
Berkeley	$45	2 units	Subject A	Subject A Dept.	1000 (est.)	1) Asian-American students may take an alternative 5 unit course (AAS3A) Contemporary Asian Studies (No fee). 2) Some colleges & depts. do not have a reading-composition requirement. 3) English for Foreign Students substitutes for Subject A. 4) Students in DIGS and Strawberry College receive special tutoring from the Subject A Department and pay no fee.
Davis	$45	None	Subject A	Subject A Dept.	647	
Irvine	$45	None	Wrtg Wkshp	English Dept.	589	
Los Angeles	$45	None	Subject A	Subject A Dept.	923	
Riverside	$45	None	Subject A	Education Dept.	325 (est.)	Subject A was formerly offered by Extension.
San Diego:						
Muir & Revelle College	None	2 units (Students may repeat course for 2 additional units)	Lit/Eng 10	Literature	700	Required only of students held for Subject A
3rd College	None	4 units	3rd College Composition	Literature	350 (est.)	Required of all students
4th College	None	4 units each	4th College (10A/B)	Literature	500 (est.)	Required of all students
Santa Barbara	$45	None	Subject A	Subject A Dept.	499	
Santa Cruz	$45	None	Subject A	Subject A Dept.	300 (est.)*	

* Some advisers with whom we talked indicated that policies varied from college to college and that in some colleges Subject A students were absorbed in regular English 1-A classes.

Only at UC are students who were successful in high school with GPA's above B; successful in the eyes of their teachers, parents and friends subjected to the humiliation and stigma of being required to take a "remedial writing course" in college and charged for the experience. They react in the expected fashion; instructors complain about poor attendance, failure to keep up with assignments, poor attitudes and expressions of hostility toward the instructors and the system.

When experiments have been tried on other UC campuses (e.g., UC Santa Cruz and San Diego where writing courses are offered for full credit and without fee), the results are dramatically different. In 1969-70, Santa Cruz offered a writing course for credit and without fee in four of their colleges; two colleges followed the standard Subject A route. Offered a "genuine" course, student attitudes changed so that "they worked hard and usually made steady progress during ten weeks of intensive writing practice"*

The standard Subject A classes suffered from the same demoralizing experiences of poor attendance, inattentive students, etc. The negative self-fulfilling prophecy won again. (See description of UCSD Third and Fourth College Writing Programs in the Section on Subject A. Also Turner-Martin Report, 1972.)

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* Izaak, George W. , Survey of Compositional Instruction in the Department of English at University of Davis, U.C. Davis. No date. (Circa 1974)

REFERENCES ON SUBJECT A PROGRAMS ON UC CAMPUSES

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Hawkins, Thom, "Group Inquiry Techniques for Teaching Writing: A Handbook for Teachers of College English", University of California, 1975.

Izaak, Georg W., "Survey of Compositional Instruction in the Department of English at U.C. Davis." (No date - circa 1974.)

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Miles, Josephine, "What We Already Know About Composition and What We Need to Know", U.C. Berkeley

Office of the Vice President - Academic Affairs, Teaching of Subject A at the University of California: Record of an All-University Meeting, April 8, 1973.

Reynolds, H. and R. Jaffee, Evaluation of Subject A Learning Materials, U.C. Berkeley, September 1974.

Tomlinson, Barbara, A Proposal for a Study of the Effectiveness of Individualized Writing Lab. Instruction for Students in Remedial Freshman Composition, U.C. Riverside, 1974.

Turner, Martin, "Report to the Academic Senate's University Committee on Educational Policy", 1972.

English as a Second Language - Formerly titled English for Foreign Students, offers 5 courses in English writing and composition. Undergraduate foreign students scoring below 500 on the TOEFL are required to take a diagnostic writing test administered by the ESL Department and admitted to courses on the basis of this exam. Graduate students with TOEFL scores lower than 550 are also asked to take the written exam so that their problems can be identified before they begin their coursework.

A study of MA students in Business Administration indicated a high correlation between students who did not complete degrees and age and whether they were native speakers of English. As a result, the BA Department requires all graduate students to take the Graduate Management Admission Test prior to admission. Non-native English speakers are accepted with lower scores than native English speakers.

The ESL Department coordinates their courses with the Dwinelle Language Laboratory, the Foreign Student Services and also refers students to the Student Learning Center. The Student Learning Center provides several Ed. 197 students each quarter (tutors for credit) to the EFS Department who work as teacher's aides and provide individual tutoring to foreign students. Also, undergraduate volunteers are used to help foreign students.

Problems and Recommendations:

1. Enrollments in ESL courses have been declining over the past few years. In 1974-5 there were 1571 non-immigrant foreign students enrolled on campus (1203 graduates and 368 undergraduates.)* Of these foreign students, 216 undergraduates enrolled

*Statistics on NON-IMMIGRANT Foreign Students Fall Quarter 1974, Foreign Student Services, UC Berkeley

in the ESL courses (16 took more than one course) and 71 graduate students were enrolled with 10 taking more than one course.

2. High staff turnover, low budget. The department does not have permanent funding and hires associates dependent on the course demand and the department is refunded each year. Most of the associates are graduate students and since positions are uncertain there is a high turnover. This limits the quality and opportunity to implement innovative programs since the department is not in a position to make long-range committments to staff. The Coordinator must devote time and energy to select and train new staff each year.

3. Limitations of the ESL courses. The courses emphasize writing and conversation, yet some students who complete these courses still need additional help before they can handle the course demands of English 1 or Rhetoric 1. Since they are exempt from Subject A, they come to the Student Learning Center for additional help.

4. Foreign students need more help in reading skills. Although the Coordinator is aware of this problem and is administering a reading test to foreign students this fall, she does not have the trained staff to implement a reading course. Foreign students with reading difficulties are referred to the Student Learning Center.

5. Experts in the problems of foreign students agree that those who do not have a strong command of English before arriving in the U.S. must improve their English within the first six months

in this country, or they rarely improve. It is therefore most important that students with language problems be identified early and given appropriate services.

6. The National Association of Foreign Student Affairs has a free consulting service which has not been used at Berkeley. They will send, at the Chancellor's request, a paid State Department expert to evaluate the English as a Second Language Program here and make recommendations. This would seem an appropriate service to take advantage of.

7. Although a few small studies have been done by the Coordinator of ESL, further research on the problems foreign students have in adjusting to the verbal demands of Berkeley courses should be done, perhaps with the assistance of Austin Frank, Director of the Student Affairs Research Office.

Remedial and Review Mathematics and Science Courses at Berkeley

Prior to 1960 the Mathematics Department offered high school review mathematics courses regularly, but these were discontinued in 1960. In 1970, several mathematics professors, including Prof. Leon Henkin, recognizing that EOP students and others were not prepared for college mathematics, developed Math P, and first offered it in 1971-72* Professor Diliberto developed and offered Math 6A in the Spring of 1972. He offered an equivalent course in the College of Engineering beginning about one year prior to this. In 1974, the Student Learning Center Math staff, under a grant from the Regents' Innovative Instruction Fund, developed a self-paced pre-calculus course (Math PS) which is currently given by the Mathematics Department as an alternative to Math P.

Math P, PS and 6 A,B are optional courses. Students who wish to enter these courses are tested during the enrollment week and are advised on the basis of this test. It is up to the student to make the final decision.

The steady increase in enrollments in these courses over the past four years may be attributed to:

1. The increased emphasis on quantitative methods in the social sciences.

   (Women students are more likely to enter U.C. with only two years of high school math, and since they tend to select social science majors, more women enroll in pre-calculus courses to catch up than was true in previous eras.)

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* Most institutions offer courses in College Algebra and Trigonometry for full credit as a pre-requisite for Calculus.

Student Enrollment in Remedial Math

	Math P	Math PS
1971-2	170	
1972-3	400	
1973-4	490	
1974-5	330	291 (Total 621 students)

(Data source: Prof. Kelley, Chairperson - Department of Mathematics)

Student Enrollment in Math 6 A & B

Spring 1972	6
1972-3	106
1973-4	174
1974-5	(Not offered, Prof. Diliberto was on leave)

(Data source: Prof. Kelley, Chairperson - Department of Mathematics)

It is interesting to note that the average SAT-Math scores of UCB entering freshmen have not shown the steady downward trend over the years as have the SAT-Verbal scores. In fact, students score higher today on the test than they did in 1960. There are significant sex differences and there has been an increase in the percentage of students scoring below 500. In 1968, 7% of the men and 23% of the women scored below 500. In 1973, 11% of the men and 30% of the women scored below 500.

Entering Freshman Mean Scores on the SAT Math Test (U.C. Berkeley)

	1947*	1960*	1968	1969	1970	1971	1972	1973	1974
Men	508	595	632	652	626	613	615	619	623
Women	411	518	564	596	554	543	561	635	555

*Data from the Muscatine Report

Math P is a course in algebra designed to prepare students for calculus. Many students also take Math P as a preparation for elementary statistics, computer science, and any other subject requiring basic algebra. It covers functions, graphs, exponential and logarithmic functions and trigonometry. Students are assumed to have had 1 or 2 years of high school algebra and thus only a limited amount of time is spent on basic algebraic computations (factoring, solving equations, etc.). The course meets four hours a week in classes of about 20-24 students. Students receive 2 units credit toward graduation and 4 units on their study lists. (Note: After receiving credit for Math 1A, 6B or 16A or the equivalent, students will not receive credit for Math P. Data source: 1975 UCB Catalogue.)

Math PS is a self-paced version of Math P, developed by Student Learning Center staff under a Regents' grant. There are no lectures. Instead, instructors spend all their time individually with students. Most of the course is covered by reading and exercises, so the textbook and materials developed are designed to be especially easy to read. Math PS includes more review of basic high school algebra for students with weak algebra backgrounds than does Math P. A diagnostic test shows students where they should start in the course. The first half of the course is suitable for general algebra preparation for chemistry, GRE, etc.; the second half is specific preparation for Math 16A. Students receive one unit of credit towards graduation after completing the first half of the course; those who complete the entire course receive two units. Students may take one or two quarters to complete the entire course. Four study list units are allotted each quarter that a student is enrolled in Math PS.

This past year, 11 sections (Fall-4, Winter-4, Spring-3) of Math PS were offered by the Math Department and two sections were offered during

summer 1975 by the SLC staff. (Note: Math PS has virtually eliminated the need for SLC tutoring for regularly-admitted students, for Special Admits, the demand for tutoring has been cut in half.)

Math 6 A & B - Elementary Mathematical Planning (4,4) is designed to "rebuild high school algebra, geometry and trigonometry and prepare students for calculus". The course "also prepares students for Stat. 2 and Chem. 1A", and is taught by Professor Diliberto.

Voluntary Programs Offered by the Student Learning Center (SLC):

Trigonometry

Although Math P covers some trigonometric functions, many students referred by L & S advisors and Math TAs have an adequate background in algebra but have not taken trigonometry and need help. As a result, the SLC staff has developed a computer-assisted-instruction course in trigonometry, and regularly offers non-credit trigonometry mini-courses. Students work at their own pace on this program and no credit is given.

Statistics

The Student Learning Center staff offer group and individual tutoring in basic statistics and have developed several CAI programs on basic concepts in statistics including probability and descriptive statistics. These concepts were chosen because they pose the greatest difficulty for beginning statistics students.

Basic Computational Skills

The Student Learning Center has a number of self-help programs on basic computational skills in its Library-Laboratory.

Remedial Mathematics on Other UC Campuses

We were only able to get limited information on remedial mathematics courses on other campuses. U.C. Davis' Math. Department offers 3 remedial

math courses. Each costs the student $45, gives no credit toward a degree and earns the student no credits on hi /her study list. The courses are: High School Algebra (Math B), High School Geometry (Math C), and High School Trigonometry (Math D). No students are required to enroll in these courses; voluntary enrollment averages 45 students per class.

In addition, U.C. Davis offers a non-credit math course to EOP students attending their Summer Enrichment Program (usually less than 50 students attend this program. Sections are small, averaging less than 10 students per class.)

U.C. San Diego has no remedial math courses, however, an experimental course this summer is being tested using UCB's Math PS materials, under the OASIS Program. The OASIS Program offers extensive individual tutoring in math to EOP students.

UCLA formerly offered remedial math courses to EOP students in their AAP Program. This fall, the Mathematics Department will offer non-credit math review courses.

Other Alternatives:

Many colleges (e.g., CSU Long Beach) offer auto-tutorial programs and review materials in math in their Learning Assistance Center. Students needing intensive remedial work are referred directly by faculty and given specific assignments to complete as a part of the course requirement.

Most institutions still offer College Algebra for full credit for non-math majors.

Chem. P - There is no course offered by the Chemistry Department for review of high school chemistry although about 15% of the entering freshmen

have not taken chemistry in high school.* (Substitution of advanced high school biology for chemistry is now acceptable for admission to U.C.) Many of these students plan to enter curricula where Chemistry 1A, B, C is required. The Student Learning Center routinely offers non-credit mini-courses in Chem. P, a review of the basic concepts in high school chemistry, although usually students take this concurrently with Chem. 1A. The Student Learning Center has received a small grant ($4,000) from the Regents' Funds for Innovative Instruction and $5,000 from Student Affirmative Action Funds to develop a self-paced Chem. P course. (This project is sponsored by Professor Connick.)

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* Many schools test students on their math skills prior to admission to Chem. 1. If the Chem. Dept. offered a screening test, like the Math Department, students could be advised of their needs for additional help. Next fall chemistry professors will ask students if they have taken chemistry in high school.

Funding and FTE of

U.C. Learning Centers

Campus	Budget for 75-6	Source	FTE
UCB	$ 310,000*	Reg. Fee	26
	35,200	Private Grants	
UCLA	227,500**	Reg. Fee	14.9
UCD	200,000***	Reg. Fee	10
UCSD	135,000	Reg. Fee Academic Affairs Student Affairs	6
UCSB	72,000****	Reg. Fee	7.75
	33,000	EOP	
UCR	64,000*****	Reg. Fee	6.5

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* Offers course tutoring for EOP students and athletes.

** Does not offer EOP course tutoring which comes under the separately funded AAP Program. The total amount listed for Academic Support Services for EOP students for UCLA in 1973-4 was $734,000. (Data source: 1973-4 State-wide EOP Report.)

*** Offers EOP tutoring. The Director is requesting additional funds for Special Admit tutoring.

**** Has special funds for EOP tutoring.

***** Does not offer EOP tutoring.

Note: UCB's Student Learning Center provides services for students and is engaged in a number of curricular development projects with faculty. The SLC's Faculty Advisory Board includes: Chairwoman Phyllis Brooks, Subject A; Dean Cardwell, Environmental Design; Professor Freeman, Physiology-Anatomy; Dean Frisch, Engineering; Professor Henkin, Mathematics; Professor Gonzalez, Chicano Studies; Professor Krantins, English; Professor Noyce, Chemistry; Professor Tussman, Philosophy; Marilyn Jacobson, CCEW Counselor; Professor Stewart, Chicano Studies; Professor Banks, Afro-American Studies; Dean Martinez, Graduate Division; and Bevan Dufty, ASUC Representative.

Ardas Ozsogomonyan, a doctoral student in the SESAME Program is developing a non-credit programmed course in stoichiometry which he will be offering to minority students enrolled in Chem 1-A this fall who volunteer for it.

Chem. Tutoring

The Student Learning Center offers individual and small group tutoring in Chem 1 A,B,C and 8 A,B, has developed several CAI programs in Chem 1-A and 8-A and a number of handouts on how to study chemistry. A collection of self-help materials and learning programs are available for students' use in the Center's Library-Laboratory.

This fall, the SLC will offer the following non-credit, mini-courses for Chem students: Chemistry 1-A, Chemistry Orientation, Classroom Confidence Workshop for Chemistry 1, and Pre-Chem 1.

What is done on other campuses?

Most U.C. Campuses provide intensive individual tutoring in Chemistry to EOP students. Some also include drop-in chemistry and physics clinics (e.g. UCLA and UCSD.) In other programs, tutors are assigned to work intensively with specific students (UCSD). Presently UCSD is testing a program where mandatory referrals are made to its academic support services. (One aspect of the program requires students on probation to sign a contract that they will attend a pre-determined number of tutoring hours.)

Increases in percentage of U.C. Berkeley Freshmen Making Low Verbal SAT Scores between 1968 and 1973

(Data from U.C. Berkeley, Student Affairs Research Office)

Freshmen Males

Students Scoring Below	1968		1973		Increase
	Percent	No.	Percent	No.	
500	10.74	189	17.68	297	+ 58%
400	5.74	68	8.78	147	+ 116%
300	.94	11	1.68	28	+ 155%

Freshmen Females

Below :	1968		1973		Increase
	Percent	No.	Percent	No.	
500	25.4	221	29.73	358	+ 62%
400	4.5	39	12.63	152	+ 290%
300	.7	6	2.53	30	+ 400%

Total (Male and Female)

Below:	1968	1973	Increase
	No.		
500	410	655	+ 60%
400	107	299	+ 79%
300	17	58	+ 241%

NOTE:

The most dramatic increase appears to be in the number of women with low verbal scores admitted in 1973 (i.e., an increase of 289% below 400 and 400% below 300).

The 241% increase of students admitted at the bottom level (below 300) creates many problems for faculty and academic support services. Many of these students are functionally illiterate (i.e., have skills below the 4th grade level).

The Student Learning Center staff is not trained to work with students with that degree of deficiency nor is the faculty prepared to teach non-readers.

Comparison of U.C. Berkeley and
U.C. Davis EOP Students' SAT Scores

	EOP Students		Regular Students	
	UCB (1973 Fresh.)	UCD (1973 Fresh.)	UCB (L & S)	UCD
Mean Verbal	383	423	528	530
Mean Quantitative	472	463	573	581

U.C. Berkeley EOP students' verbal scores are lower than the U.C.Davis EOP group. Whether this reflects differences in recruitment procedures or self-selection factors cannot be determined (i.e., most EOP Berkeley students live at home and come from inner-city schools). U.C. Davis EOP students typically live on campus and come from rural areas or smaller cities and towns.

MM:md
SLC/3.18.75

responded to the relativism which permeates the intellectual and social atmosphere of a pluralistic university. Among the students who consulted us, a few seemed to find the notion of multiple frames of reference wholly unintelligible.[1] Others responded with violent shock to their confrontation in dormitory bull sessions, or in their academic work, or both. Others experienced a joyful sense of liberation. There were also students, apparently increasing in number in the years following World War II, who seemed to come to college already habituated to a notion of man's knowledge as relative and who seemed to be in full exploration of the modes of thinking and of valuing consequent on this outlook.

This variety in the way students first experienced their pluralistic environment seemed to us to be followed by an equally wide variety in the ways in which students went on to assimilate that experience. Although an occasional student would retreat, defeated, and some would detach themselves through a cynical exploitation of intellectual gamesmanship and moral opportunism, most seemed to go on to develop a personal style of commitment in both their thinking and their care.

We could hardly suppose that these issues were peculiar to the experience of students who came to consult us. Nor indeed did we suppose that these were parochial phenomena limited to the environs of Harvard University. We did suppose that the pervasiveness and inescapability of the impact of relativism on college students might well be a development of the twentieth century, and we have since documented the supposition. Our documentation is limited to Harvard College, but the implications for other colleges with a diverse student body and a pluralistic intellectual outlook seem obvious.

The change in the outlook of the faculty is evident in the character of the intellectual tasks set for students on final examinations. The graph shown in Figure 1 is based on the final examinations for courses in History, Government, English Literature, and Foreign Literatures enrolling the largest number of freshmen in Harvard College at intervals from 1900 to 1960. The assumption made is that the kind of operation called for by an examination question expresses the examiner's conception of knowledge of his subject. Analysis was performed by sorting questions into categories, with appropriate tests of reliability. The graph presents the percentage of weight on each examination given to questions requiring considerations in more than one frame of reference, that is, relativism.

[1] For example, in response to such an assignment as "Compare the concepts of the tragic heroine exemplified by Antigone and Cordelia," these students would fail to perceive the direct object of the verb "compare" and would write comparisons of Antigone and Cordelia, as persons, against the background of a single, implicit frame of reference. We came to feel that persistent misperception of the form of such intellectual tasks, even after repeated explanations of them, could not be

Figure 1 documents a revolution in the very definition of knowledge confronted by freshmen in a college of liberal arts in this century. The new relativism of knowledge has inevitably been accompanied by a relative address to values. In Henry Adams's words: "The movement from unity to multiplicity, between 1200 and 1900, was unbroken in sequence and

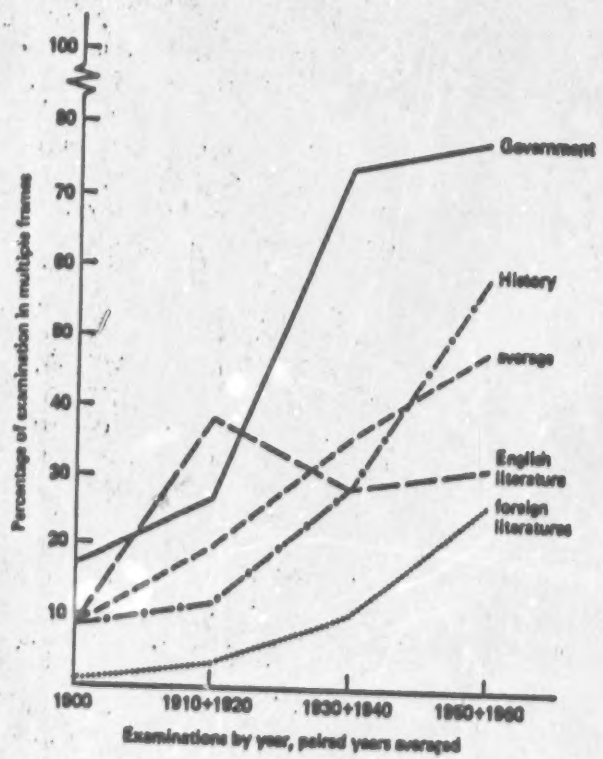

FIGURE 1 Weight of examination requiring consideration of two or more frames of reference. Courses enrolling most freshmen in Government, History, English Literature, and Foreign Literatures 1900–1960.*

rapid in acceleration. Prolonged one generation longer, it would require a new social mind" (Adams, 1931). The rate of acceleration has been greater than perhaps even Adams foresaw, and not one but two generations have passed.

* Since these categories of courses deliberately ignore major changes in curriculum, especially the introduction of the program in General Education in the mid-forties, the graph portrays the minimum of the range of the change. With the large courses in General Education included, the average of

APPENDIX B
XXX-4

Distribution of Special Action admissions by College, Fall, 1973 (OAR)

	Freshman (190)*			Advanced Stndg. (189)*		
	Total Regis.	o/o of Sub-Total	o/o of Total	Total Regis	o/o of Sub-Total	o/o of Total
Ag Sci	10		5.2%	11		5.8%
Chem	3		1.5%	3		1.5%
Engin	18		9.4%	17		8.9%
CED	5		2.6%	4		2.1%
Eth St.	3		1.5%	3		1.5%
LS		(151)*	79.4%		(151)*	79.8%
Bio Sci	15	9.9%	7.8%	14	9.2%	7.4%
Hum	13	8.6%	6.8%	13	8.6%	6.8%
Phy Sci	8	5.2%	4.2%	8	5.2%	4.2%
Soc Sci	36	23.8%	18.9%	38	25.1%	20.1%
Undcl.	79	52.2%	41.5%	78	51.6%	41.2%

* Total in sample

Special Action, Fall, 1972

Scholastic Standing as of 9/73 by Admissions Category (OAR)

	Total in Sample	Less than 2.0	% of Total	2.0 - 2.9	% of Total	3.0 - 4.0	% of Total
Freshmen							
Athletes	21	3	14.3%	15	71.4%	3	14.3%
EOP	77	30	38.9%	35	45.5%	12	15.6%
Others	36	5	13.9%	22	61.1%	9	25. %
	134	38	28.3%	72	53.7%	24	18. %
Advanced Standing							
Athletes	23	7	30.4%	15	65.2%	1	4.3%
EOP	82	38	46.3%	36	43.9%	8	9.8%
Others	29	6	20.7%	16	55.1%	7	24.1%
	134	51	38.0%	67	50.0%	16	11.9%

Special Action, Fall, 1973

Scholastic Standing as of 3/74 by Admissions Category

	Total in Sample	Less than 2.0	% of Total	2.0 - 2.9	% of Total	3.0 - 4.0	% of Total
Freshmen							
Athletes	28	3	10.7%	21	75.0%	4	14.3%
EOP	90	30	33.3%	42	46.7%	18	20.0%
Others	46	11	23.9%	23	50.0%	12	26.1%
	164	44	26.8%	86	52.4%	34	20.7%
Advanced Standing							
Athletes	24	11	45.8%	11	45.8%	2	8.3%
EOP	125	34	27.2%	57	45.6%	34	27.2%
Others	34	4	11.8%	19	55.8%	11	32.3%
	183	49	26.7%	87	47.5%	47	25.6%

BERKELEY UNIFIED SCHOOL DISTRICT

Scores on the Comprehensive Test of Basic Skills for 12th grades, October, 1972 by ethnicity. Showing Grade Equivalents by Ethnic Subgroups at the Upper Quartile (Q_3), Median (M), Lower Quartile (Q_1) and Mean ($\bar{X}$). (Norm Grade Equivalent = 12.1)

	White				Asian				Black			
	Q_3	M	Q_1	$\bar{X}$	Q_3	M	Q_1	$\bar{X}$	Q_3	M	Q_1	$\bar{X}$
READING												
Berkeley High School Grade Equivalent	13.6	13.6	11.8	13.6	10.1	7.0	4.6	7.4	7.2	5.6	3.2	5.6
District Grade Equivalent	13.6	13.6	11.5	13.6	11.7	7.6	6.7	8.4	8.4	6.0	3.3	6.1
LANGUAGE (Usage)												
Berkeley High School Grade Equivalent	13.6	13.6	10.1	12.7	10.4	9.1	7.0	7.7	7.1	4.4	2.3	4.8
District Grade Equivalent	13.6	13.2	9.7	11.6	10.6	9.6	6.1	8.5	7.6	5.4	3.5	5.7

Table from a report by Dr. Harriett G. Jenkins, Assistant Superintendant of Berkeley Unified School District, entitled "Black Parents' Concerns" sent to Dr. Richard Foster, April 17, 1973.

MM:md
SLC/3.10.75

Number and Percent of Black Students Enrolled in A through F Requirements for Admission to U. C. who are Receiving a "C" Average or Better

1. Number of Black students at Berkeley High School

Grade			
	10	-	480
	11	-	392
	12	-	303
			1175

2. Number and percentage of Black students enrolled in A through F requirements for admission to U. C.

Grade				
	10	-	130	(27%)
	11	-	118	(30%)
	12	-	65	(21%)
			313	(27%)

3. Number and percentage of Black students enrolled in A through F requirements who are receiving a "C: average or better

Grade				
	10	-	101	(78%)
	11	-	90	(79%)
	12	-	47	(72%)
			238	(76%)

4. Number and percentage of ninth grade Black students enrolled in A through F English, Math and Foreign Language

	Number (Percent) Black students enrolled		Number (Percent) with "C" or better	
A - F English	132	(30%)	86	(66 2/3%)
A - F Math	184	(41%)	130	(70%)
A - F Foreign Language	85	(19%)	63	(71%)

* This table is taken from a report by Dr. Harriett G. Jenkins entitled "Black Parents' Concerns" sent to Dr. Richard Foster, Suptd., April 17, 1973